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MASTER THESIS

**Development of Timor-Leste's Contractual Regimes Focusing on the Timor Gap's
Tasi-Mane Petroleum Infrastructures Project**

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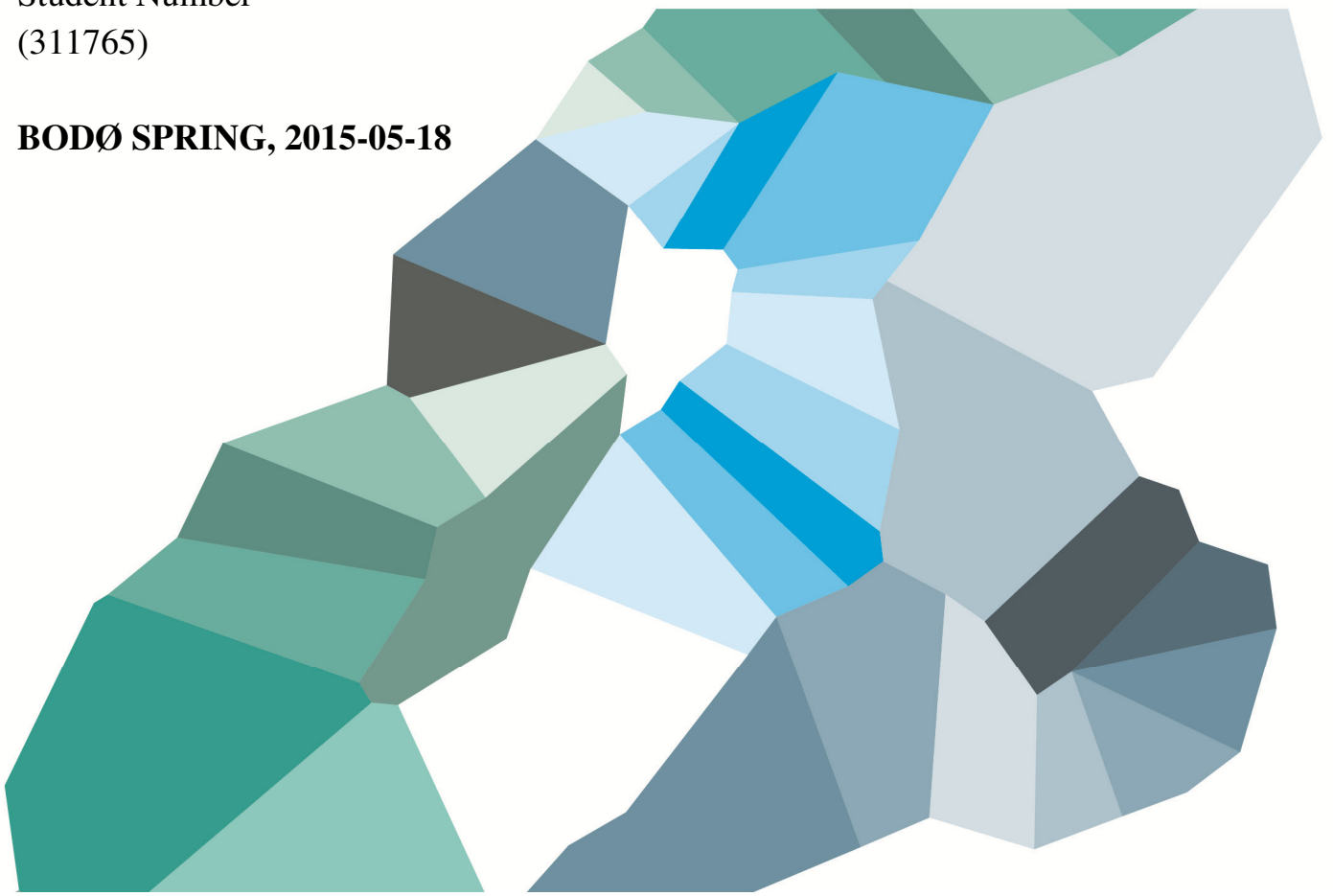
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Abstract

Building huge infrastructure projects is challenging for governments. Trying to include the national firms to increase their competencies may be even more difficult in the context of developing countries where the infrastructure is needed “yesterday”. By utilizing the new economic institutions theory, new institutional sociology and agency theory, I am exploring the challenging situation of the contracting system in the Democratic Republic of Timor-Leste. The research object is a Tasi-Mane cluster project, where 16 interviews with involved actors have been conducted in early 2015. The findings present a strong lack of national participation in the infrastructure projects.

Thus, the research shows that there are various public and private actors involved in the contractual regime, while institutional arrangements and coordination between actors are weak. The emerging organizational field lacks the power and is disconnected from the rest of the economic development. Also interactions do not increase in the adequate speed, nor the information load, which keeps the field in immature state. National firms are both included and excluded from the participation in the infrastructure projects by legal forces (law), international companies and other factors. To some extent the previous experiences with national firms have raised the doubts of their capabilities, experiences as well as morale and thus decrease the probability of their involvement in the infrastructure projects. If not addressed, the problem can become chronic and Timor-Leste will be relying on the international companies in terms of building the infrastructure as well as maintaining it afterwards. This study points how to develop the contracting regime further in accordance with the strategy development plan (SDP) 2011-2030, and include the national firms in building the economy of Timor-Leste. Several changes need to be implemented in order to increase the performance and participation of the national firms and make them full members of the field.

Suggestions for future studies and limitations are highlighted.

Keywords: Actors, organizational field, governance structures, institutional theory, contractual regime, petroleum infrastructures project, Tasi-Mane, Timor-Leste

Resumo

A construção de projetos de grandes infraestruturas é um desafio para os governos. A tentativa de envolver as empresas nacionais no aumento das suas competências pode ser ainda mais difícil no contexto dos países em desenvolvimento, onde as infraestruturas são necessárias "para ontem". Procurei analisar a situação desafiadora do sistema de contratação na República Democrática de Timor-Leste tendo em consideração a nova teoria de instituições económicas, a nova sociologia institucional e a teoria da agência. O objeto de pesquisa é um projecto conjunto em Tasi-Mane e, no início de 2015 foram realizadas 16 entrevistas a intervenientes envolvidos no projeto. Os resultados apresentam uma elevada falta de participação nacional nos projetos de infraestruturas.

Assim, a pesquisa indica que existem diversos intervenientes, públicos e privados, envolvidos no regime contratual, no entanto, a organização e coordenação entre estes intervenientes é insuficiente. As organizações emergentes não têm poder e estão desajustadas relativamente ao restante desenvolvimento económico. As interações não aumentam de acordo com o necessário e o mesmo acontece com a quantidade de informação, o que mantém as organizações num estado de imaturidade. As empresas nacionais são incluídas e excluídas da participação nos projetos de infraestruturas pelas forças legais (legislação), pelas empresas internacionais e outros fatores. Em certa medida, as experiências anteriores com empresas nacionais têm levantado dúvidas relativamente às suas capacidades, experiência, assim como questões de ordem moral, diminuindo a probabilidade do seu envolvimento nos projetos de infraestruturas. Se este problema não for abordado pode tornar-se crónico e Timor-Leste ficará dependente de empresas internacionais em termos de construção de infraestruturas, bem como a respetiva manutenção. Este estudo indica como se deve desenvolver o regime de contratação de acordo com o plano de desenvolvimento estratégico (SDP) 2011-2030, por forma a incluir as empresas nacionais na construção da economia de Timor-Leste. Precisam de ser implementadas várias modificações de modo a aumentar o desempenho e a participação das empresas nacionais e torná-las membros de pleno direito da área.

São ainda destacadas sugestões para estudos futuros e algumas limitações.

Palavras-chave: Atores, campo organizacional, estruturas de governação, teoria institucional, regime contratual, projeto de infra-estruturas de petróleo, Tasi-Mane, Timor-Leste.

Sammendrag på norsk

Det å bygge store infrastrukturprosjekter er utfordrende for myndigheter. Det å samtidig inkludere nasjonale bedrifter for å øke deres prosjektgjennomføringskompetanse kan være enda vanskeligere for utviklingsland der infrastrukturen helst burde vært bygd "i går". Ved å benytte ny økonomisk institusjonell teori, ny institusjonell sosiologisk teori og agentteori, utforsker jeg den utfordrende situasjonen for Den demokratiske republikken Timor-Leste ved innkjøp og bygging av større infrastrukturprosjekter. Forskningsobjektet er Tasi-Mane cluster-prosjektet, hvor jeg har utført 16 intervjuer med involverte aktører i begynnelsen av 2015. Funnene i undersøkelsen indikerer en sterk mangel av nasjonal deltakelse i infrastruktur prosjektene Tasi-Mane cluster-prosjektet representerer.

Denne forskning viser videre at det er ulike offentlige og private aktører involvert i utformingen av kontraktsregimet, samtidig som institusjonelle ordninger og koordinering mellom aktørene er svake. Nasjonale bedrifter er både inkludert og ekskludert fra deltakelse i infrastrukturprosjekter av lovverket i Timor-Leste, nasjonale rammebetingelser og internasjonale selskaper. Til en viss grad har myndighetenes tidligere erfaringer med nasjonale bedrifter reist tvil om nasjonale bedrifters evner, erfaringer, samt moral og dermed redusere sannsynligheten for deres engasjement i infrastrukturprosjekter. Hvis dette emnet ikke adresseres, kan problemet bli kroniske og Timor-Leste vil være avhengig av de internasjonale selskapene i forhold til å bygge infrastruktur samt vedlikeholde disse etterpå. Denne studien peker hvordan en kan utvikle kontraktsregimet ytterligere i tråd med strategien i utbyggingsplan (SDP) 2011-2030. Forslagene anviser hvordan de nasjonale selskapene kan inkluderes i å bygge økonomien i Timor-Leste. Flere endringer må iverksettes for å øke ytelsen og deltakelse fra de nasjonale bedrifter og gjøre dem i stand til å konkurrere på like fot nasjonalt og internasjonalt.

Forslag til fremtidige studier og begrensninger er også diskutert.

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Glossary

NDA	National Development Agency
CAFI	the Administration Board of the Infrastructure Fund
CoM	Council of Ministries
CCI-TL	Chamber of Commerce and Industry of Timor-Leste
CNT	Timorese National Consortium
IADE	Institute for Development Support for Medium and Small Enterprise
ICB	International Competitive Biddings
MoF	Ministry of Finance
MPS	Major Project Secretariat
MPMR	Ministry of Petroleum and Mineral Resources
MPWTC	Ministry of Public Works Transportation and Communication
NCB	National Competitive Biddings
NPC	National Procurement Commission
NIE	New Institutional Economics
RDTL	República Democrática de Timor-Leste
SEPFPOPE	Secretary of State for Employment Policy and Vocational Training
SDP	Strategic Development Plan
UN	United Nations

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Chapter 1.0 Introduction

1.1 Background description

Today almost all countries have been involved in building of big infrastructure projects. High cost results that usually these projects are initiated and financed by government capital or state sources (Chan *et al.*, 2009; Easterly and Rebelo, 1993, Sanchez-Robles, 1998). It is proven that building infrastructure increases business activities and productivity (Égert, Kozluk & Sutherland, 2009). Thus, infrastructure contributes to boosting of economic growth by giving access to main and key services (ADB, JBIC, World Bank, 2005). In addition, the development of infrastructure can be a driver for poverty reduction (Calderón & Servén, 2004; Cockburn *et al.*, 2013).

Government itself has no opportunity to build the projects; therefore, it attracts the sub-contractors. In order to attract the suitable candidates as well as make the process competitive and transparent, achieve efficient and prompt delivery of the project, governments have been utilizing the tender system of bidding and subsequent contracting (Klein, 2008; Furubotn and Richter, 2010). It is also a choice for opening for international bidding in order to access the specific competences. Final choice depends on many factors and criteria can be different from project to project according to the aim that needs to be achieved. This means in some cases, if the infrastructure is needed as quick as possible, it can be afforded but on a high expense, while making it slower might give an opportunity of making it cheaper and building the local competences (e.g., Fill & Visser, 2000; Tadelis, 2002). Thus, planning a big infrastructure project will involve making choices and negotiating.

In developed countries, national firms can have competitive advantage over their international competitors in terms of better understanding of the local context, may possess a specifically

developed technology, and potentially increase local employment and taxes, simply keeping the money “in house”. In developing countries the situation may not be the same, and opening of a tender for participation from international organizations with more experience, equipment and capacity, can significantly impair the chances of the national organizations in the bidding rounds. This issue is especially important for young developing countries such as República Democrática de Timor-Leste (hereafter: RDTL). RDTL needs a rapid development in order to be included into the global economy. However, weak institutions and lack of infrastructure hinders this process (see, e.g., see Easterly and Levine, 1997; Easterly and Rebelo, 1993). Remote regions are not able to fully participate in the economy and thus remain in their traditional path of development. The lack of connection in traditional regions leads to spread of different dialects, methods of traditional agriculture, domestic violence, lack of education and lack of understanding of the current changes. Being separated, these regions do not follow the rules and regulations made from the capital and thus make a huge difficulty for governments to be addressed to and informed. These people do not travel much and therefore are not engaged into the economy building through employment, taxation system and other attributes of the developed firms. Other issue is a lack of funding and general banking system is not as developed and supportive to the national commercial organizations/ entrepreneurs, leading to that only government have funds to engage in big infrastructure projects. Thirdly, the level of technology remains poor, when it comes to the ability to serve and build a big infrastructure project (e.g., Kusago, 2005).

When it comes to start-up of an infrastructure project, the problems, faced by government of a developing country, are many. Among them: (1) lack of national firms with enough equipment, experience, capacity, and capital (2) lack of legitimacy and trust from other countries and thus

poor participation in tender (3) poor legislation/lack of national legislation (4) tender manipulations or corruption (Soreide, 2006; Tanzi & Davoodi, 1998).

At the same time government faces other challenges as to what extent involve the national and international firms, how to find a balance between the experience, speed and efficiency and learning of national firms for the potential for further maintenance by local and national firms. The right decision may be crucial for the whole country development and therefore this study is of high importance as it considers these issues.

A motivation or aim of this study has been to explore challenges and opportunities for increased national industry participation in International Tasi-Mane downstream projects. The research problem addressed in this study is: **“What institutional forces have been forming the current contractual regime in RDTL?”** To address this broad problem, I have been dividing it into sub-questions to get a more concrete understanding of the following issues:

- a) What institutional actors have participated in the formation of the current contractual regime and how?
- b) How was the local industry/national firms included and excluded in this formation of current contractual regime?
- c) What forces has been stimulating /hindering for formation of the contractual regime?
- d) How does government balance short term quality versus long term capacity building?

The above stated questions are thoroughly chosen and aim to contribute both to the theoretical development of the contractual regime and address some problems that developing countries experience during this process and provide possible ways of searching for solutions.

Firstly, to understand the challenges perceived by the government of RDTL, I will describe the interaction between the players and how the government apparatus around contractual regime has been developing from 2002, the year the RDTL became an independent country. The focus of this study is on the most recent big infrastructure project within petroleum sector – Tasi-Mane.

My approach is to explain in detail how the Tasi-Mane cluster projects' tender and contracting mechanism are executed and whether the national petroleum company, named Timor Gap invites the national firms into participating in the bidding for the Tasi-Mane projects, whether national companies actually participate in bidding and/or further sub-contracting after project initiation. The answers for these key questions will then give an understanding of how the mechanism of Timorese government owned company TIMOR GAP is implemented and has influenced the participation of national companies. This thesis compares the feedback from the national companies that have participated and those who have not participated and the various government structures and responsible ministries in order to answer the research questions. In addition, with these questions I can understand how current contracting mechanism helps to achieve the transparency and legitimacy for the RDTL for the national and international companies and authorities.

The remainder of this thesis is as follows: firstly, the theoretical background for this research is discussed. Secondly, the methodology of the research is presented and a description of data collection process included. Next, the local context of the research is outlined. Finally, I present my analysis of empirical data and findings and conclude with a discussion of key findings and suggestions for further research/implications.

Chapter 2.0 Theoretical framework

In this theoretical framework I present three theoretical approaches that can guide the research and give insights in how Timorese government contracting system decisions are made and what actions can engage and enable the participation of national companies in the Timor Gap projects. Competitive contracting has become an attractive form in developing countries due to changing conditions of international aid and desire to get a quick way to respond to current gaps in essential public services (Smith et al., 2005). Annually, a lot of million dollars are contracted by governments. Infrastructure projects are not an exception. Governments are constantly pressed to be more effective, cut the costs and at the same time provide more services, be more flexible and responsible (Smith et al., 2005). The historical formation of the contractual regime, the role of the involved actors, potential problems in form of moral hazard and information asymmetry are further addressed in this section through the lenses of New Institutional Economics, New Institutional Sociology and Agency Theory.

New Institutional Economic theory or Williamson's approach gives a solid framework to analyze the historical formation of the government structure, organization of institutional arrangements and focuses on four levels of the involvement of the national organization in the contracting system. It consists of four interconnected levels of social analysis. Secondly, New Institutional Sociology theory addresses the capabilities of state's strategy and its effect on industry projects implementation and helps to analyze historical processes of contractual and organizational changes. Institutional approach gives a better understanding of the processes that lead to the development of mechanisms, which influence the amount of national firm's participation. Lastly, Agency theory provides the explanation of the possible situations of moral hazard and information asymmetry in contractual arrangements.

2.1 New institutional economics (NIE) perspective

New institutional economics perspective has become a new branch of knowledge as an interdisciplinary research merging several fields of studies such as sociology, organization theory, economics and political science (Klein, 1999). It offers a comprehensive view on the formation, development and day to day operation of institutions within the contracting regime, and their influence on other actors.

Williamson (1985, 1998 & 2000) defines four social levels of analysis in NIE: embeddedness, institutional environment, governance, resource allocation and employment (see Figure 1).

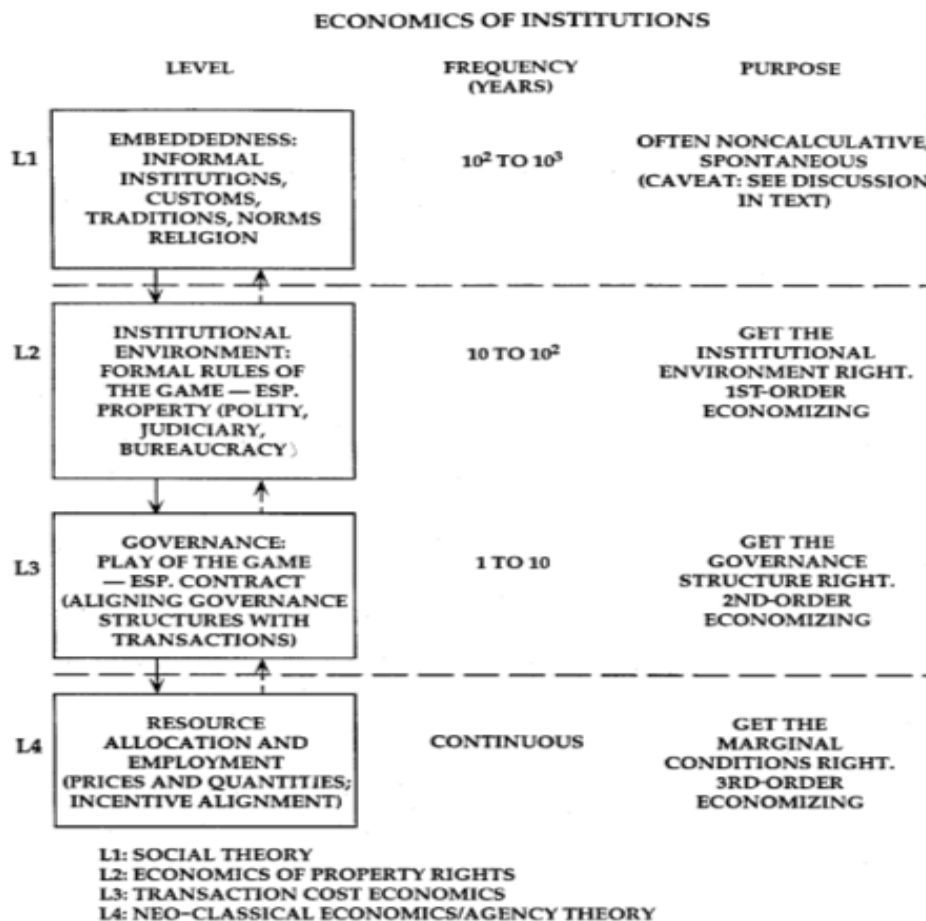


Figure 1 Williamson Economics of institutions (from Williamson, 1998, p.26).

As we can see each of the levels has a different frequency. It means that some processes can be observed in short time, while others only within centuries or even millenniums.

The highest level, embeddedness, refers to religion and taboos, customs and norms, which are being practiced for a long term, forming a context or the environment where the actors operate. This level is important, as it consists of informal institutions that change very slowly. Understanding these forces may predict the certain behavior of the actors in a given environment and industry, *ceteris paribus* (Williamson, 1998). Informal constraints are located at this level.

The second level, institutional environment, provides the structure of the institutions and the rules of the game, by which the economic activity is organized. This implies that formal constraints are located at this level. All written laws and regulations are representing this level. Williamson stresses that design instruments, executive, judicial, legislative and bureaucratic functions of government are constrained by the shadows of the past – past decisions bear consequences to the present situation. Institutional environment establishes the rules of the game such as legislation, political forces and bureaucracy. Furthermore, NIE emphasizes how economies run at the country level and concerns how economic, political, legal and social institutions influence their performance (Platteau, 1994a, b). On this level, the economic development of the nation can be evaluated (North and Weingast, 1989; North 1981). Definition of property rights and contract laws are established in this level (Williamson, 2000). While it may seem that contract law would have made a perfect and costless way of functioning of legal system, in the real life the problems and disagreements occur and need to be solved by the means of court. This leads us to the next level, which introduces the development of the contractual relations and their governance.

The third level is governance. Governance refers to “the play of the game” such as contract aligning governance structure with transactions.

2.1.1. Institutional arrangement

Institutional arrangements is the ways in which transaction are organized, are particular guiding principle as what Williamson (1985, 1996) names “governance structures” that are drawn by the trading associate/partner to act as intermediary in specific economic relations, or in other words as an accord/contract agreed by particular individuals to administer their own relations. Institutional arrangements are the traditions and rules that fabricate the institutional environment are mainly be on economic sides occurrence/phenomenon. This governance include public bureaucracies, business firms, nonprofit organizations, long-term contracts, commercial contracts and other contractual arrangements are considered as form of institutional arrangements (Williamson, 1996).

Contractual arrangements

As presented earlier, there is macro level of NIE that calls institutional environment which is elaborated by Davis and North (1971, 6) and a micro level call institutional arrangement. And Williamson (1979) transaction cost economic is deal with institutional arrangement. Transaction cost economic recommends that by paying attention on transaction cost, and pursuit all those governance structures or arrangement that make economies on costs, according to (Masten, 1996) a person who make policy or decision able to tailored and decide an appropriate design of organizational. Even though, this manner may incline to simplify the matters of institutional options or choices. A helpful concept into contracting process offers by transaction cost economics.

According to the idea of transaction cost economics from Williamson approach it suggested that there is no black and white distinction to be produced between “hierarchies” and “markets”. It was clear that the fact is that in new institutional economics realm, the application of Pareto Optimal abstraction is not there. There is a prominence emphasis that in this enlightenment method various substantial amount from a comparative institutional method in which the relevant alternative is between diverse option concrete institutional arrangement (Demsetz, 1969).

With this understanding, Furubotn & Richter’s (2010) study on the new institutional economics of markets have designed an governance structure approaches of dealing with some sort of primary activities of trade such as: search, inspection, bargaining, contract execution, control, and enforcement. In addition, the approach in which these primary purposes are achieved has considerable evidence based magnitude in the friction-filled new institutional economics realm.

Every government has their own interest to make their choice. Furubotn & Richter (2010, p. 4) contractual arrangement of transaction activities is organized in three different levels; ‘(1) pre-contractual activities – (pre-qualifications or search and inspection) (2) contracting - (negotiations, contract formation), (3) post-contractual (execution, control, enforcement)’.

Transaction cost

Coase (1937) define transaction cost as a theory that developed to provide explanation to a firms’ decision to “make” (vertically integrate) rather than depending or relying on relationship of market based (buy) to gain inputs of intermediary manufacturing. Or in the other words, in this case, a government will tend to expand until the cost of organizing an extra transaction within the government will become equal to the cost of carrying out the same transactions by means of exchange on the open market. Furthermore, Williamson (1989) with other scholars has produced this TCT framework into a costs major source that a firm must attempt to reduce so that

increases efficiency of economic. With this framework, behavior opportunistic threat from a partner of transacting is should be a massive influence on a decision of firm to not or to internalize transaction.

A transaction cost is simply as the friction between buyer and seller which is explained by opportunistic behavior. Williamson (1985) defines opportunistic behavior as a self-interest seeking with guile. It includes methods of misleading, distortion, disguise and confusion. Williamson (1989) distinguishes between *ex ante* and *ex post* transaction cost. *Ex ante* costs are those of drafting, negotiating and safeguarding an agreement. Among *ex post* costs, Williamson mention bad adjustment costs, haggling cost, setup and running costs associated with the governance structures to which disputes are referred, and bonding costs of effecting secure commitments. Transaction cost analysis (TCA) provides insight that cost minimization explains structural decision. The friction between buyer and seller is higher than through and interval hierarchical system the buyer should internalize. To internalize, that is, integrate vertically, to reduce transaction cost. The essence of transactions cost theory assumption is that government will try to minimize the combination of costs under *ex ante* and *ex post* cost when undertaking transaction costs. Therefore, when considering the most efficient form of organizing its services and projects, the buyer will choose the solution that minimizes the sum of *ex ante* and *ex post* costs.

2.1.2. Transaction cost economics

Transaction cost economics (TCE) perspective employed here as theoretical framework to explain how the government contract is formulated. Transaction cost economics constitutes an additional method to understand institutional arrangements. Thus, in this situation, the attention

is on governing or administering transactions. This is what Williamson (1985) promotes a governance structure. The administering governance needed to keep from harm/safeguard the trading parties from a variety of hazards related with exchange. TCE carries that all yet the modest transaction needs some sort of mechanisms. Williamson (1985) the suitable governance structure rely on transactions' features and unique.

The governance method or technique is defined by its prominence incomplete contract. Thus, in the frame of transaction cost, normally costs are imposed by economic organization because in usual practice the most complex contracts are incomplete. Therefore Williamson (1981, 1985) his analytical about transaction cost economics in particular investment might play a very important role after a contract is concluded. Because among others non-standards contract or an imperfect contract may occur as result from practices of monopolistic. Transaction cost is important as Williamson describes it by utilizing "fundamental transformation" concept (change from thick markets at contract selection stage to bilateral dependency at contract execution and renewal stages). Right after conclusion of a contract, a locked situation of a bilateral monopoly likely happens where the parties meet themselves. Even though previously they were free to indicate with whom to work with. Whatever transaction type of investment, bargaining, inspection and search are main points of making transformation happen. Moreover, it has to take into account that future is uncertain we never know what future will bring. Williamson's transaction is known as contract theory that usually functions in the uncertainty situation information of asymmetric in which self-enforcement and legal enforcement hand in hand.

Holdup problem

The contracting interested parties exposed to some sort of risks when contract is incomplete. Mainly when situations alter all of a sudden/unexpectedly, the earliest governing/administering

consensus may no more be useful. The necessity to adjust to unpredicted possibility adds up to and additional contracting cost. Collapse or fail to adapt forces what Williamson (1991a) names “maladaptation costs”. The most frequent and debated exemplar of maladaptation is “holdup” problem or delay/robbery problem. This holdup problem is related to particular relationship of investments. Investing in specific assets brings agents to possible hazard. So the well know of a contractual hazard’s example is holdup problem. In most cases, Williamson (1996b, p. 14) contractual hardships can appear from various origins ‘(a) bilateral dependence; (b) weak property rights; (c) measurement difficulties and/or over searching; (d) intertemporal issues that can take the form of disequilibrium contracting, real time responsive, long latency and strategic abuse; and weaknesses in the institutional environment.’ They have possibility to force maladaptation costs.

2.1.3. Economic history and economic growth

The consideration of economic growth and economic history to the institutional environment have got progressively common or frequent in economic history and has greater impact enhance our conception of how economic grow through time (North et al., 1973; North, 1990). Development of economic is visible as an answer to the institutions development or transformation that contributes to the relationships of commercial and social. Therefore, economic growth is no more be highly regarded as a steady or slow, unavoidable evolution from local self-sufficiency to specialization and labor divisions. Development of economic accordingly rely on the level to which trade possible hazards (opportunism, the like, and shirking) can be ruled by institutions, which lowering costs of information, ensure the establishment of capital and offer cooperation. In addition, Wallis and North (1986) booming in

commercial activity imply 'transacting' as a result of an economics industrializing; finance, management, trade, banking and insurance. The growing of market and industrialization needs the presence of institutions to lessen the costs related with transactions. North (1991) the main roles of economic history and of economic development is to describe for the transformation of economic and political institutions that provoke and provide an economic environment that encourage enlargement or escalate productivity.

2.2 New Institutional Sociology (NIS) perspective

According to Dobbin (1997) and Lounsbury (2008) institutional theory form an idea or describe institutions as identity, capable of producing of interests, and examples of convenient practice that take form in broad context of socio-cultural. Severally, this comprehensive context equip the institutional pillar regulative, normative and cultural-cognitive forces/pressures essentially form the behavior of organizational (Lounsbury, 2000; Scott 2008b). Institutions are vary and formed in different level where it can be interpreted in many stages it depends the researcher either use top-down or bottom-up institutional approach or high level pillars or field level phenomena. Therefore more relevant here as empirical principle and most significance master concepts for institutional theory, is that of organizational fields (Owen-smith and Powell, 2008; Scott 2008b). DiMaggio & Powell (1983) and Scott et al., (2000) viewed organizational field as organizations community that take part in similar activities and are fundamental to common pressures or forces of regulatory and reputational. Little more vibrant definition prompt distinguished fields play to attract positions to bring opportunity and make narrow the possibilities of different group of social. In addition fields are formed through into its characteristic shaped by expectations and conventions, and rules that establish convenient activities and legitimate or valid positions

(Owen-smith and Powell, 2008). Hence, this definition stressed “fields of force” that set social action. DiMaggio and Powell (1983) view on organizational field, constitutes those organizations, in entirety representing acknowledged domain of institutional life: key national firms, regulatory agencies, consumers, and other organizations producing similar products or services. By finding what types of institution are in the process of being developed within the fields and understand how it went and try to find forces or drivers of such development. Investigating this kind of questions is a crucial or a great significance precondition to grasp or apprehend changes occur in organizations.

Table 1 theoretical perspective on organizational fields

Theoretical Perspective	Authors	Key Elements	Description
Field as the totality of relevant actors	DiMaggio; Powell.	Signification and Relationship	Set of organizations sharing systems of common meanings and interacting more frequently among themselves than with actors from outside the field, thus constituting a recognized area of institutional life.
Field as a functionally specific arena	Scott; Meyer.	Social Function	Set of similar and different interdependent organizations that are operating in a functionally specific arena, technically and institutionally defined, in association with their exchange partners, sources of funding and regulatory bodies.
Field as a center of dialog and discussion	Hoffman; Zietsma; Winn.	Debate for Thematic Interest	Set of organizations, often with different purposes, that are recognized as participants in the same debate surrounding specific issues, plus those concerned with the reproduction of institutional practices or arrangements related to the matter.
Field as an arena of power and conflict	Vieira; Carvalho; Misoczky.	Domination and Power of Position	Field as a result of the dispute for its domination in a dynamic marked by (re)allocation of the resources of power of the actors and by their position in relation to other actors.
Field as an institutional sphere of disputed interests	Fligstein; Swedberg; Jepperson.	Power and Cognitive Structures	Constructions produced by power-holding organizations that influence the rules of interaction and dependence in the field owing to their interest which, in turn, are reflections of their position in the social structure.
Field as a structured network of relationships	Powell; White; Owen-Smith	Structural Articulation	Set formed by relational networks that are commonly integrated and intertwined, emerging as structured and structuring environments for organizations and individuals revealed from topological and structural cohesion studies.

Source: From Machado et al., (2010 p. 34).

As we can see each of the theoretical perspectives has almost in the same emphasis on field. It means that these perspectives can be observed in the current case. But, I paid much attention on DiMaggio and Powell (1983) institutional theoretical framework of “*emergence of fields*” or

what they call **totality of relevant actors** “*connectedness and structural equivalence*”. DiMaggio (1982) institutional process definition, “*structuration*” which consist of the explanation of (1) an increase interaction among organizations in the field (2) emergence of inter-organizational power (3) increase in information load for the organizations in the field (4) development of mutual awareness of the organizations in a set of organizations that they are participate in a usual or common enterprise. Laumann et al, (1987) defined connectedness as transactions existence that binding tightly organizations in the field one another; for instance, Williamson (1979) contractual relational may include, personnel participation in common enterprises for example; labor union, professional associations, or in level of informal organizations ties such as flows of personnel. This is the constellations of organizations that are powerfully linked to one another. While structural equivalence is commonality of position in a relationship structure (White et al., 1976); for instance; structurally equivalent of two organizations if they are tightly of the similar constellations of other organizations, even if they themselves are not related.

According to Morrill (2007) emerging fields illustrated as evolving via tree phases; innovation stage where actors exploiting some and ignoring others to advance their own interests; in the mobilization phase wherein clear institutional credential is disappearing/nonattendance, progress of fields is of oftentimes full of complexity power dynamics as several actors competing to achieve disciples/follower for their logic. Structuration phase refers solid application, where (Reay, Golden-Biddle, & GermAnn, 2006) interpreted logics as “concrete practices” and interchangeable, taken-for-granted norms and structures (DiMaggio, 1991; Covaleski & Dirsmith, 1988) field levels and emerge at the organizational.

So, DiMaggio and Powell (1983) and Morrill (2007) commonly presented that, organizations in the field can generally prepare/cultivate opportunities for change, assemble help from institutionalized actors, searching to fit into prevailing systems, and seeking several new ideas begin to diffuse, actors may draw selectively from them, where actors used to diffuse their preferred logics and multiple logics within the focal field, exploiting some and ignoring others to advance their own interests, improve their objective to develop new action, and making rational decisions to move forward.

DiMaggio and Powell (1983) Identify three defining process from the contemporary institutional theories of organizations by establishing of earlier conceptions and relative permanence which is treating institutionalization as a variable and separating its causes from the major consequences.

(a) Mimetic or imitative, others' achievements or successful components adopted when alternatives are uncertain, (b) normative connections about facts of social, generally from outside sources, for example professions, (c) another definition process is "coercive" is a heart to state legitimation in the environment as approach of institution. It is pressures from other organizations in which they are dependent upon and by cultural expectations from society.

DiMaggio and Powell (1983) at the very beginning differentiated two origins of isomorphism of organizational which is institutional and competitive. Latter in its changing was a driver for the aim of legitimacy and started involved mimetic, coercive and normative forces, where this can now related and embedded with normative, regulative and cultural-cognitive as high level institutional pillars (Scott 2008b). Previously, this was described of obtaining economic and technical efficiency. Considerable amount of users and researchers read this classification as illustrations of distinct type of organizations (Powell 1991). The extensive analysis from Powell has been used in many areas of discipline. This can be described that organizations economic and

technical objectives are established by the people in the context of social life, and it now can be associated in the institution constructed by (Meyer and Rowan, 1977; Lounsbury, 2008; Scott, 2008). In this sense, competitive forces and institutional may affect and relate to each other, and have combinations effect on the process of organizational changes. Thus, the combination of them was proposed.

Grasping the various of organizational practice, as Lounsbury (2008) proposed, can be permitted by means give a central attention on rivaling logics as *institutional rationalities* of the actors constituted of organizational field's development (Meyer and Rowan, 1977). Smith and Powell point to Friedland and Alford (1991) and Thornton's (2004) comprehensive term that an institutional logic is an aggregate of beliefs related practices "*schemes and scripts*" that a fields' player mutually carry in common. Practices and beliefs have been suggested as a parcel or organizing principles and means for action. Logics provides rational for action. But in some situation when different logics comes together play in the same circumstances of platform, they can yield new activities and/or cause conflict. Logics more effective when they are compatible and when they are simply taken-for-granted. Moreover, Lounsbury underline that to perform the power of logic, it is requires to proof how a fast amount of wide values, cultural beliefs, assumptions, and rules cognition of structure and equip particular field decision making. Give attention on one hand to institutional dynamics, on the other hand, this view responsible to provide attention process and organizational practices is crucial to investigate how small-actors interpret the institutions.

To summing up this theoretical perspective, as this study' ambitions is to present what institutional forces have been forming the current contractual regime in RDTL. It is quite broad, however the combination of institutional macro and micro level are used to explain political

development/changes in terms of contractual regime and be connected to organizational change, moreover specifically the study paid much attention where focusing to the organizations field of the national firms participation in Tasi-Mane project. I am going to pay attention on the interaction/interplay of the institutional actors pressuring the field of possible national firms/industry in international project of Tasi-Mane.

2.3. Agency theory perspective

Lastly, I would like to present shortly agency theory and its particular importance for this thesis and how it adds to our understanding in combination with the theories presented before. According to Eisenhardt (1989 and 1988) agency theory is taking into consideration two important points that transaction cost oversees. These are risk aversion and information as a commodity (Eisenhardt, 1989), which will be paid attention later in this subsection.

A contract agreement and negotiations between principal and agent are central in the agency theory. Central is that each of them is acting in their own interest and thus some problems can occur. Eisenhardt (1989) divides them into two groups: a) the principal and agent have different and contradicting desires and goals and b) principal can experience problems in monitoring what agent is actually doing. The last problem is also called risk sharing and is actual when principal and agent differ in their attitudes towards risk.

As for the agency problem, there can be different reasons and conflicting goals between RDTL government and the winning contractor. Firstly, due to the different ministries and government structures are involved in the different stages of contractual arrangements (pre-contractual, contractual, post-contractual) and each of them may have their own vision on how the contract should be delivered thus it makes the winning contractor to adapt and negotiate with each of

them. While the contractor may be interested in delivering the project faster, the government may start making obligations like sub-contracting to the national firms, using the local natural resources in building projects and so on. This can be costly for the contractor and time consuming as well. Also being a developing country, the monitoring system as well as legislation may be not sufficient and therefore the execution of the contract may be not fully and rationally followed and the risk of moral hazard is therefore higher here. By moral hazard is meant the lack of interest of the agent to be doing what the principle wants (Eisenhardt, 1989).

Other problem that the government in a developing country may face is misunderstanding of the execution process due to the lack of technological equipment and education of the national organizations that lead the principal to agree on the terms of agent and trust that the work is delivered as stated in the contract. It means in practice that the governments in developing countries do not possess the necessary expertise to monitor the execution of the contract. This problem can be solved by introducing a third independent party that can evaluate the achieved milestones and serve as a translator between a contractor and the government authorities. When it comes to the information treatment, agency theory is considering it as a commodity. Investments in the information systems can help in order to control the agent opportunism.

Eisenhardt, with the reference to the positivist stream of agency theory proposes that the agency problem can be minimized by making a contract outcome-based, when the result of it should be a concrete outcome that can be measured. This seems to be true in the term of infrastructure projects where the result can be a highway, supply base, airport building and so on. The above discussed theories are summarized in the table below:

2.4 Summary of theoretical perspectives

Table 2 Summary of theoretical perspectives

Theories perspective	Authors	Key features	Description
New Institutional Economic (NIE)	Williamson; North;	Institutional environment	a constellation of fundamental political, social and legal ground rules that administer political and economic activity
	Williamson, Coase	Institutional arrangement between formal and informal institutions	Agreements made by specific individuals to govern their own relationships. This arrangement is the institutions of governance - include contracts and organizations and in distinctive the business firms.
	Williamson, Coase	Transaction cost economics	Concerned with understanding how variations on certain basic characteristics of transactions lead to the diverse organizational arrangements
	North	Economic history and growth	To explain for the evolution of political and economic institutions that create an economic environment that induces increasing productivity
New Institutional Sociology (NIS)	DiMaggio and Powell;	- Institutional fields	An aggregate of organizational in the field that represent a recognized area social life. A structurally equivalent and interconnected organizations in the same environment. E.g., national industries, oil company, universities, and consulting firms.
	DiMaggio and Powell;	- Institutional mechanisms	Constraining process that forces one unit in a population to resemble other units that face the same set of environmental conditions". Types of isomorphism: competitive and institutional, "organizations compete not just for resources and customers, but for political power and institutional legitimacy, for social as well as economic fitness".
Agency theory	Eisenhardt	- Trust - Legitimacy - Information asymmetry	Offers a unique insight into information systems, outcome uncertainties, and risks. And empirical valid perspectives, especially when coupled with complementary perspective. Can incorporate an agency perspective in the studies of many problems having a cooperative structure.

I believe that the triangulation of theories will help me to understand the phenomena in a more holistic way and fully communicate the current level of involvement of national firms in RDTL in state infrastructure projects.

Chapter 3.0 Methodology

This chapter presents a combination of techniques applied to gather empirical data and justifies utilized analyses techniques. This is a qualitative case study and it applies a constructivist approach. Main data sources are semi-structured interviews, official documents and other relevant secondary data. The validity and reliability issues are addressed in the end of this chapter.

This chapter continues with a very brief presentation of the chosen philosophical position where ontological and epistemological assumptions are discussed.

3.1 The philosophy of the research

Easterby-Smith *et al.*, (2012) identified reasons for understanding the philosophy of research. Firstly, the understanding is needed to clarify the research design, by considering what kind of evidence is required and how it should be gathered and further interpreted; and also how the answers will be obtained to answer the research questions. Secondly, limitations of particular approaches are indicated, and created designs may go beyond the researcher's past experience. It also provides the researcher with a frame which guides how to adapt research designs according to the constraints of different knowledge structures. Thus, the purpose of a scientific research is to increase our understanding of the phenomenon and enable the changes (Easterby-Smith *et al.*, 2012).

To achieve that, one should first identify ontological and epistemological assumptions the research is based upon. "*Ontology is about the nature of reality and existence*" (Easterby-Smith *et al.*, 2012, p. 17), and is relying on the beliefs of humans of what is real and what is illusion and what is considered to be the truth. The ontologies of different philosophies differ. While realists

consider only single truth exists, nominalists on the other side of scale, consider that there is no one truth. This study is closer to the relativist approach. For relativists there is no single truth, but the truth that is rather working in the current context. Their position enables us to explore the views of different respondents on the same phenomenon and conclude whether their understanding of it differs due to their beliefs in what constitutes the truth.

“*Epistemology is about different ways of inquiring into the nature of the physical and social worlds.*” (Easterby-Smith *et al.*, 2012, p. 21). Roughly, two polar positions exist here. Positivists believe in the existence of external social world and that objective methods should be utilized to measure it. Social constructivists believe that social world cannot be objectively measured and cannot exist separately. Every person constructs its own social reality and can only be measured subjectively (Easterby-Smith *et al.*, 2012). This research is based on semi-structured interviews where the meaning of the respondents on the given phenomenon is investigated. Thus, this research is closer to the social constructivism approach, due to the differences in the perceptions of the reality by respondents. Our interest lies in revealing, examining and explaining why these differences occur rather than finding the ultimate truth.

3.2 A qualitative approach – advantages and limitations

Qualitative research attempts to capture subjective understanding of the external world from the perspective of interviewees/participants and abandons the task of representing an objective unchanging external reality (Easterby-Smith *et al.*, 2012, p. 158). This approach was chosen for the following reasons. First, in a creative process, the qualitative approach aims to give and understanding of the sense that respondents make of their world (Easterby-Smith *et al.*, 2012). I have been capturing different understandings of the same infrastructural project in Timor-Leste

from the different points of view of different interviewees. Secondly, the descriptive nature of this thesis presents the discussion of the process of the government contracting mechanism and deep understanding of particular chosen case from a holistic perspective. The research questions addressed are not opening for the quantitative research nor accurate measurements and repetition of events in future with the foreseen outcome. The use of semi-structured interviews gives a chance of both obtaining the information that was planned by the researcher as well as it opens for discussions and findings outside of the “box” that can come spontaneously from the respondent. I believe that conducting these interviews face-to-face has given a high valuable data for this study, kept me constantly challenged and revising the chosen theories and perceptions of the contracting phenomenon, thus involving me into reflexive thinking under way, according to the recommendations of Alvesson and Sköldbberg (2000). Qualitative method has given me the freedom to modify my approach under way in order to get a deeper understanding of how the national government in RDTL is utilizing the contracting regime and involving the national companies. In a developing country like Timor-Leste, I was constantly exposed to new and exciting information about the current case, previous experience of interviewees, and other knowledge, which enriched this study and made the presentation of the process as holistic as possible. Some improvements have been made on the way. One could have never achieved this quality with merely means of survey or quantitative approach.

3.3 Data collection method

3.3.1 Primary data

16 semi-structured interviews have been conducted with the initially chosen interviewees in the RDTL during February-March 2015. Among the informants are higher level government officers, representatives of the Chamber of Commerce and Industries and managers of national

and international private firms. The choice has been made due to their links and interests in the Tasi-Mane project. More specifically the respondents come from: Ministry of Petroleum and Mineral Resources (MPMR), Office of the former Prime Minister (Director for National Agency of Development (NAD) and Procurement Commissioners). During the time when interviews were undergoing there was a reshuffle in the government which NAD and National Procurement Commission (NPC) moved under the Ministry of Planning and Strategic Investment; Ministry of Public Works, Transportation and Telecommunication; State Institute for the Support of Micro and Medium Enterprise Development (IADE) under the Ministry of State, Coordinating Minister of Economic Affairs. On the other side, I interviewed both international and local companies and a Non-Government Organization associated with Tasi-Mane project and the Chamber of Commerce. Most of the interviews have been performed in the capital of the country – Dili. The usual process included contacting the potential respondent by phone or email with the following meeting at the suitable time for the respondent. Some interviews have been made in the province where the Tasi-Mane project is undergoing, which is approximately 6 hours away from the Capital. More detailed information about the informant's position, place and the duration of interview can be found in appendix 1.

3.3.2 Semi-structured interviews

This research attempts to illustrate the inter ministry responsibility and relationships over the Tasi-Mane infrastructure project and the utilization of a contractual mechanism and decisions around it. In order to obtain a trustworthy information semi structured interviews have been utilized. Having structure gives the opportunity of guiding the respondents in the direction that is wanted to be obtained in the interview also assuring that the necessary information will be given

as well as giving the opportunity for respondents to freely express their thoughts. This enriches the predefined questions with more relevant facts, stories and life-line experiences.

The candidates for interviews were carefully chosen. All the informants from government have the authority to provide the accurate information based on their position, practices and experiences and existing procedures. Historically, they have been involved into the planning process and development of Tasi-Mane project both individually and institutionally. See appendix 2 for guide questions in the English Language. Interviews have been performed in both the English language and in the local language – Tetum. Interviews have further been transcribed into the English Language by independent authorized translator. I have checked the tape and the transcription in order to ensure the quality of the translation and transcription as well as asked two independent researchers to check some of the English transcriptions.

3.3.3 Secondary data

Gathering secondary data in Timor-Leste is a challenging process. Very limited internet access and no public library make it difficult to get insight in the secondary data sources. However, for this study public governmental papers have been accessed, as well as historical documents and statistics. These sources have been produced for the different purposes of internal and external use and are therefore treated with care. Therefore, it is essential to let the research questions guide and frame the data (Ghauri and Gronhaug, 2010). The published data aims to provide transparency to the contracting process. The examples of documents include public laws, regulations and guidelines, strategic development plan and National Development Plan and reports from relevant NGOs. Some information has also been studied through the local press and both national and international newspapers.

3. 4 Data analysis

Three interconnected theoretical frameworks are applied as lenses for this study and used to analyze the result of the transcribed interviews and relevant secondary sources in order to answer the stated research questions. In the process of data collection, I have constantly analyzed the incoming data and measured them against my research objectives and goal. This has also guided the choice of important points and selection of the citations as well as guided the forming of the empirical findings and following conclusions.

The findings have been extracted from the transcribed interviews and analyzed through the lenses of chosen theories and obtained meaningful conclusions from it. To condense highly complex and context-bound information into a format which tells a story in a way that is fully convincing to others is a common issue for a qualitative researcher (Easterby-Smith *et al.*, 2012, p. 162). Moreover, it goes beyond the requirement of “good journalism” where sources are well referenced and “interpretations” are balanced. Following the Easterby-Smith *et al.*, (2012) recommendations I have tried to present the content in a coherent way and present the analysis in a convincing way and findings in a chronological order, intuitively understandable.

3. 5 Validity and reliability

Research is ineffective, becomes belles’ letters or fiction, and loses its utility without rigor (Morse *et al.*, 2002). In their study Morse *et al.*, (2002) argue that in order to achieve rigor in a qualitative research, it is necessary that the issues of validity and reliability are addressed in the study. They further argue that researcher in qualitative research should regain which having responsibility for validity and reliability by executing strategic integral of accuracy or verification and self-correcting during conducting inquiry. To attain quality research it basically refers to the fundamental question of “*how can inquirer persuade his or her audiences that*

research findings of an inquiry are worth paying attention to” Lincoln and Guba (1985, p. 290). Also presented in (Easterby-Smith *et al.*, 2012, p. 157) researcher should keep in mind the relevance that research has to the respondents. In this study three theories are utilized as well as different sources of information. This data and theories triangulation gives the opportunity of building a more holistic picture of the phenomena, thus increasing validity and reliability, obtaining information from both public and private informants strengthens the research. The amount of interviews is sufficient to reach the saturation.

Chapter 4.0 The local context

4.1 Presentation of the research case (Tasi-Mane)

Timor-Leste have recently found oil and is wanting to use it in a proper way to build the national economy, however the infrastructure is weak and needs to be improved. Due to this, a Tasi-Mane project has been developed and is currently under construction.

Tasi-Mane (Male Sea - the Tetum name for the Timor Sea between Timor-Leste's south coast and Australia) is the name for the centerpiece of the Timor-Leste Government's development strategy as corridor for petroleum infrastructure along the southwest coast of the country. According to (Government, 2011) Strategic Development Plan (SDP) and development Program of 2012-2017, the petroleum infrastructures in Tasi – Mane on the South Coast will be developed in order to provide adequate petro hub infrastructures in the region. The project consists of three clusters and aims to give an economic boost to the municipalities and country as a whole. Government believes that the industrial clusters will provide support for the petroleum industry by establishing proper infrastructures. The three clusters include a Beaçó Liquefied Natural Gas (LNG) plant, Betano Refinery and Petrochemical cluster and lastly the Suai Supply base which involves the building of a new highway and establishment of new airport - Suai.

The Beaçó LNG plant cluster is the area where the natural gas pipeline from the Timor Sea (mainly from Greater Sunrise gas field) will reach Timor-Leste main land and where TIMOR GAP E.P will build an LNG plant to process the gas. This cluster will integrate the LNG Plant Complex and a marine facility to enable loading and downloading of goods. In addition, an old airport in Municipality of Viqueque will be upgraded to the adequate capacity to serve as a regional airport and provide daily service for LNG plant operations.

The Betano cluster complex is an industrial place with refinery and petrochemical industries, along with a petroleum industry administration city (Nova Betano). The refinery will provide different forms of fuel such as diesel, gasoline, jet-fuel, and LPG for domestic consumption. In long run, it is considered as a source of increasing the Timorese trading in petroleum (oil and gas) products, huge amount of the refinery product will be sold to foreign markets. According to Timor Gap, E.P. refinery capacity is estimated at 30,000 barrels per day (bpd). The new administration cities will provide robust jobs for the South Coast people and offer social services and housing. According to government, the building of petrochemical area and refinery will be arranged in the form of working together or cooperation between private and public sectors

Suai Supply Base (SSB) industrial cluster has been part of the Government's public vision since early 2008. The project includes building of the following facilities: sea port (breakwater and jetties), storage yard, heavy metal workshop, ship building, repair facilities, warehouses, offices, fuel tank farm, housing complex and industrial park. In short, it is an entry point for the equipment and materials to establish petro industries infrastructures. Therefore, Timor-Leste through its national oil company Timor Gap E.P will build and operate a logistics supply base in the Suai municipality to support all offshore oil and gas activities in the Timor-Leste Exclusive Area (TLEA) and the Joint Petroleum Development Area (JPDA). This is an avenue for the Tasi - Mane area to build a petroleum sector domestically which is capable to link facilities for business and industry. According to Timor Gap, E.P, the Council of Ministers (CoM) has awarded Suai Supply Base (SSB) to Hyundai Group from South Korea and the construction of supply base is expected to start in 2015.

A highway, which aims to connect all three clusters, will be built in this area. Its distance is 156 km. The highway is projected with a speed limit for up to 100 km/h in flat areas and 60 km/h in

mountain areas, and will reduce total travel time from Suai to Beaco to less than 2 hours, against 6 hours today. According to government, the road will be built in four stages, according to the industries growth and economic necessity. This road project has been awarded to Covec, Chinese Company that has started to build this project in 2015 and will finish in 2020.

PT. Waskita Karya (Persero) Tbk. from Indonesia has been awarded to build the Suai Airport. The Suai Airport will allow the safe operation of light airplanes and helicopters to support petroleum activities. Rehabilitation and extension works were launched in May 2014 where the runway will be extended to 1,500m and will cater to fixed-wing (20-50 seats) aircraft and helicopters with passenger capacity of 15/20. To see where the project is situated, the Timor-Leste map with Tasi-Mane cluster project locations' is presented below in figure 2.



Figure 2 Map of Tasi-Mane cluster project locations. Source: Timor Gap E.P, 2014.

4.2 National Oil Company Timor Gap

Timor Gap, E.P, a National Oil Company, received a mandate from the council of ministries through Ministry of Petroleum and Mineral Resources (MPMR) to administer and manage the

day to day activities for the implementation of the Tasi-Mane three cluster projects. Historically, the idea for the Timor-Leste to have a National Oil Company (NOC) is based on its Petroleum Act. When the Petroleum Act was enacted as Law No. 2005/13 ten years ago, one of the most important changes was the addition of Article 22 "State Participation in Petroleum Operations," which allows a state-owned National Oil Company to participate in joint ventures for exploring and exploiting petroleum resources in Timor-Leste. In addition, Article 8 of the Model Production Sharing Contract under the Petroleum Act also allows an NOC to become a partner in petroleum exploration in Timor-Leste's exclusive areas, with up to a 20% share (Journal da República, 2005). The decree-law to create Timor-Leste's NOC was only approved on 25th of May 2011, by the Council of Ministers and two month later on the 20th July 2012, the President promulgated the decree-law as it was published as Decree-Law No. 31/2011 (Journal da República, 2011), and the NOC name's was changed to what we know today as **TIMOR GAP – Timor Gas & Petroleum, E.P.** (*Empresa Publica*). The Council of Ministers and President approved the legislation after extensive discussion on how TIMOR GAP would relate to the Petroleum Fund. Government created TIMOR GAP mainly to provide an avenue for the state to act as an entrepreneur in order to have business stake from its petroleum industry. Other reason for establishment is to build high quality human resources and national expertise in order to participate and own, in other word for the purposes of holding and managing, the assets owned by the State of Timor-Leste in the petroleum sector assigned by law.

The upstream business activities such as exploration and production, including provision of services, both onshore and offshore, within or outside of the national territory, are entrusted to TIMOR Gap by government. The TIMOR Gap is also entrusted with the carrying out of downstream business activities, including the storage, refining, processing, distribution and sale

of petroleum and its by-products, as well as natural gas and any other hydrocarbons, and also the industrial processing of petroleum by-products and the carrying out of other activities in the petrochemical industry. Currently, Timor Gap has two subsidiaries. In 2013, Timor Gap has signed its first Production Sharing Contract (PSC) as a 24% partner in a joint venture for area 11-106 in the Joint Petroleum Development Area. The rest of the project is operated by the Italian company Eni, which owns 40.53%, and the Japanese company Inpex owns 35.47% (ANP, 2013). The structure of the company is presented below in *Figure 3 Timor Gap E.P. Structure, Source: Timor Gap E.P (2014)*.

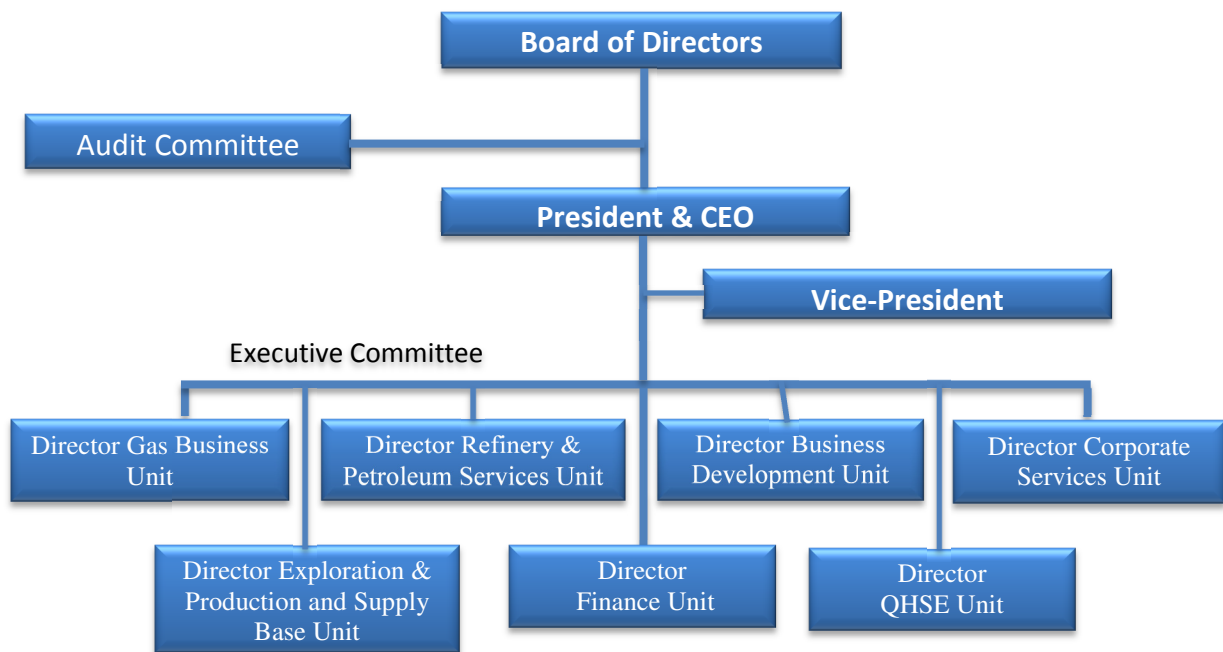


Figure 3 Timor Gap E.P. Structure, Source: Timor Gap E.P (2014).

To sum up, Timor Gap E.P is a young company. It has received initial funds from government and its annual turnover is still negative. I have interviewed the President and CEO of this company. In contractual arrangements they play an important role as they facilitate with other

actors on all levels and are involved in project development, contract negotiations and day to day implementation of different projects.

4.3 The dual purpose of Timor Gap's Tasi - Mane project

"I want our oil to be used to create our own industry and to provide jobs for Timorese people" Teacher, Hatulia, Ermera Municipality, National Consultation, July 2010 (Government of Timor-Leste, 2011).

The key pillar of Timor – Leste future development is its petroleum sector which is designated in its Strategic Development Plan (Government of Timor-Leste, 2011). The Timorese government and most of the politicians believe that the petroleum sector crucial for the growth of the country and employment of the young generation. In developing of this sector, Timorese government strategy is to make sure and enable its natural resources to be used to build the nation and support its own people. Moreover, the Timorese government's vision has always been to minimize the unemployment rate by creating jobs through industries opportunities. Developing petroleum infrastructures and increasing access to oil and natural gas will absolutely create jobs and growth of economy. In particular, it is expected the increase of regional businesses and supply services. Timorese government believe that the Tasi - Mane project will have influence on other industries and services, employment, scope of expertise both locally, regionally and nationally. Furthermore, the municipalities will receive property taxes from the plant in addition to increased personal taxes, which will lead to increased public spending.

To sum up, the Timorese petroleum industry is developed with a mission of maximum participation of Timorese citizens and businesses (Government of Timor-Leste, 2011). Government believes that this is a better way of development, than simply selling the oil and gas overseas.

Chapter 5.0 Findings and analysis

5.1 Findings

5.1.1 Development/changing the contractual regime during 2002 to 2015

In order to understand the current contractual situation and involvement of the national firms in the current infrastructure projects historical background should be discussed as well. In this study I will look closer on the previous 13 years (between 2002 and 2015), since the independence of RDTL. This period is credible to study the formation of mechanisms and institutions to better understand the situation today. 1999-2001 was a transitional period, where UN forces helped to establish the structure of a new country. Self-governance has started from 2002. Current government continues implementing the 2011-2030 SDP and therefore Tasi-Mane project is adopting previous contractual regimes as well.

We can define three different eras in which the contractual regimes have been changing. **At the very beginning**, the country was destroyed and the political and economic situation was poor and unstable. The basic infrastructure was almost absent and the country has literally stood up from ashes. Since then, the situation has changed dramatically. During the post-referendum time, after the August 1999, the country faced the absence of functioning organizational institutions. At this time a lot of international donors like United Nations have been helping to rebuild the country promoting political, social and economic recovery. Thus, the nation was led by the United Nations Transitional Administration in East Timor (UNTAET) from the end of 1999 to mid-2002. UN was governing the territory, exercised the executive and legislative authority through this period and building capacity to support the government in further self-governance.

The contract regime in this period was administrated by the UNTAET with the regulation number 2000/7 and the regulation number 2000/10¹.

The second stage was the first self-governance period which started in 2002 until 2007. This period characterizes with a country that receives full financial support from both multilateral and bilateral development partners due to the absence of both state and private investments. Though the people were proud of the first independent government, it faced a lot of challenges. The government's focus on stage was building the basics of governance system, as well as education, and health systems and basic infrastructure. Economically, it has been placed as one of the poorest countries in the world, with an average income per capita of \$0.52 in 2001 and \$0.88 in 2007 (TLSLS, 2008). In this period the government successfully agreed upon the joint development of petroleum offshore field with Australian government which provided the country with savings in a petroleum fund for about 16 billion USD. At the time, government of Timor-Leste still utilized the inherited contracting regimes from UNTAET. The new contractual regime was developed in 2005, where all the public procurement was placed under the administration of Ministry of Finance. Government created several decree laws: the procurement legal regime, administrative infractions of the procurement, judicial regime and public contracts legal regime. These arrangements were developed to carry out some of the constructions and rehabilitation of infrastructure projects at that time. The development of economy and important milestones of 2002-2015 as well as historical development of important legislative work for the contractual regime in Timor-Leste is presented in (Figure 4 *Developments of Timor-Leste Contracting Regimes* below:

¹ Regulation No. 2000/7 on the establishment of a legal tender for East Timor and Regulation No.2000/10 on public procurement for civil administration in East Timor; available at; <http://www.jornal.gov.tl/lawsTL/UNTAET-Law/Regulations%20English/regenglish.htm>

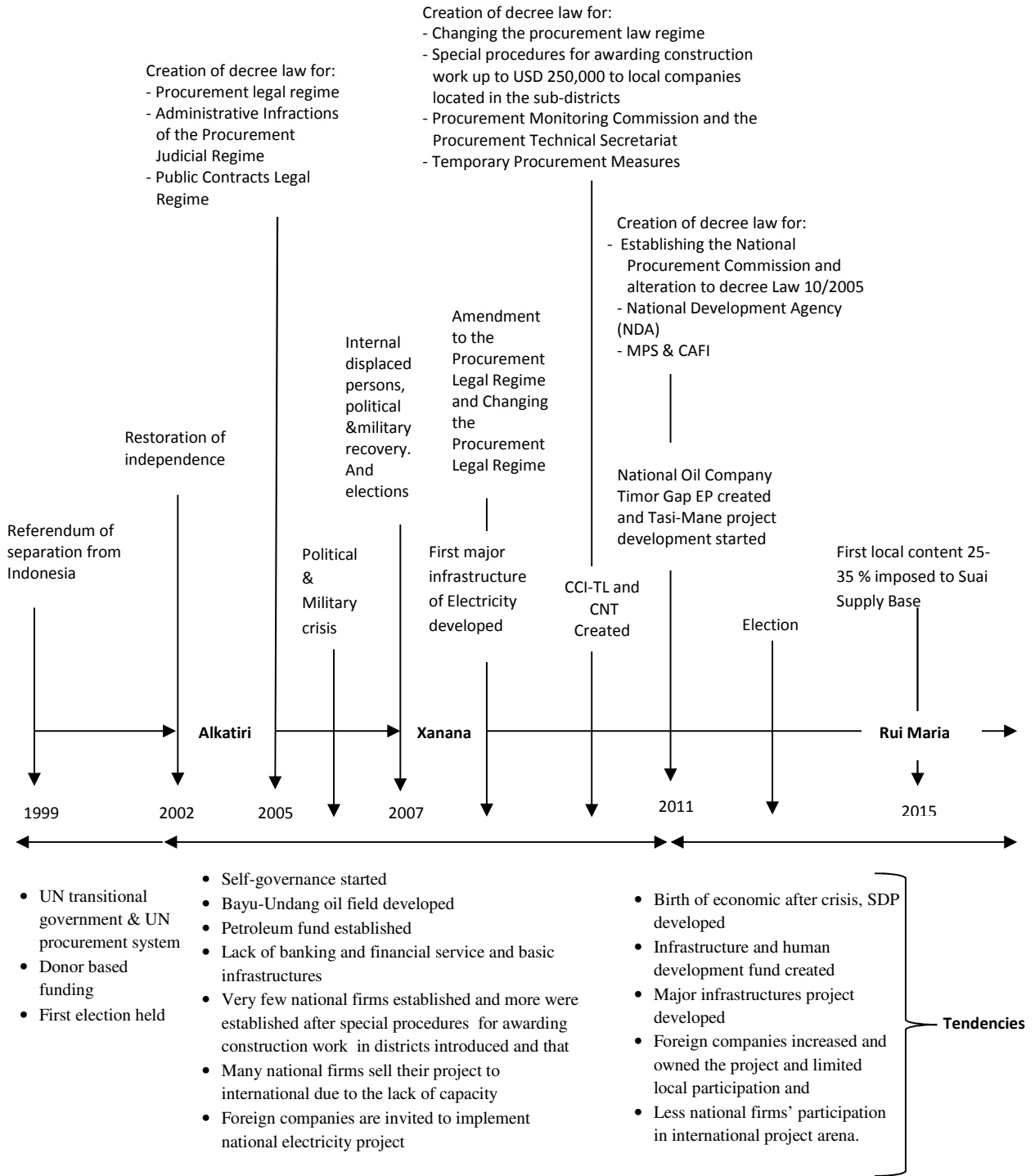


Figure 4 Developments of Timor-Leste Contracting Regimes.

In 2006 Timor-Leste faced a turbulent year of a new political and military crisis. Many people lost their houses and country experienced a large amount of internal displaced persons (IDP) living in barracks, as well as rebels movement and an attempt of and civil unrest caused many losses of the houses, hundreds of thousands Internal Displaced Persons (IDP) were living under the barracks, rebels movement and till an attempt of assassination of the President. As result of this political crisis the first Prime Minister DR. Mari Alkatiri resigned².

The third stage covers 2007 to 2015 when the new Prime Minister Kay Rala Xanana Gusmão comes to power. His government was able to regain the political and military stability and addressed the outstanding and remaining political fractions, military and social problems, and solved IDPs and veterans issues at the time. In this era, the petroleum fund has been stated in an annual state budget and the funds used to solve some social and economic problems and provide funding for several basic infrastructure projects.

In 2008 government made changes in procurement regime by taking into consideration the recent development of the country. At that time the growth was mainly explained by the state sponsored investment in infrastructures. It was promoted a decentralization of the procurement authority role from Ministry of Finance to other ministries³. The first country's international infrastructure project – providing electricity - started in 2008 where state investments have been remarkably high and accounts for 57 percent (World Bank & MoF, 2015). During this period, bridges and roads also have been built and Tasi-Mane project have also started.

From 2008 to 2011, government tries to push the economy to grow rapidly. In 2010 the procurement legal regime was changed in order to facilitate the development of sub-district level

² Report of the United Nations Independent Special Commission of Inquiry for Timor-Leste, Geneva, October 2006 available at; <http://www.ohchr.org/Documents/Countries/COITimorLeste.pdf>

³ Decree law no. 24/ 2008 of changing the procurement legal regime, available at; https://www.mof.gov.tl/wp-content/uploads/2011/05/Decree_Law_24_2008_EN.pdf

projects, with the objective to build a robust local development, promoting knowledge and accountability through the contracting of construction works to local companies, in order to encourage the development of their companies, to increase the performance.

Hence, since 2008 to 2011 Timor-Leste has achieved average double-digit economic growth of 11.9%. One of the reasons for that has been the maintaining of economic stability from 2008 and prudent fiscal management⁴. However, the banking and financial service systems, especially access to credit and loans have not been enhanced and are currently close to be absent.

In 2010, Prime Minister Kay Rala Xanana Gusmão introduced the summary of Strategic Development Plan (SDP) in Timor-Leste Development Partner Meeting. One year later in 2011 the SDP launched a 20 years strategic plan for Timor-Leste, lasting from 2011- 2030. Hence, the SDP plan aims Timor-Leste to become an upper-middle income country, with a secure, well-educated and healthy population, by 2030. SDP presents and argues that the four key national attributes of political will, economic potential, national integration and a dynamic population will underpin the achievement of this vision. With infrastructure development, economic development and social capital as the main three pillars. In relation to SDP and to support its implementation, the major contractual arrangements have changed dramatically in 2011 compared to previous years. The government established infrastructure fund and its organizational institution such as: Administration Board of Infrastructure Fund (CAFI) and Major Project Secretariat (MPS) to manage and approve for the funds, in addition, government approved and established a procurement entity called National Procurement Commission (NPC) and National Development Agencies (NDA) as infrastructures supervision and quality control bodies. All these institutions were established under the council of ministries supervision to

⁴ Statement by the Spokesperson of the IV Constitutional Government on April 8, 2010. Available at government portal; <http://timor-leste.gov.tl/?p=2507&lang=en&lang=en>

make sure that projects which value exceeds one million USD within infrastructure fund will meet high quality (World Bank and MoF, 2015). With the increased number of bigger projects the presence of international multi companies in the country increased as well. Hence, with the growing amount of international projects, the government has also engaged and established the Chamber of Commerce and Industry (CCI-TL) in 2010 as a partner in development of infrastructures. In addition to this, during this period the Timorese firms have established a national consortium (CNT) with the objective to take a part in the development of infrastructure projects within the SDP scope. In 2011, the government established the national oil company, Timor Gap E.P, and one year later after reelection of Prime Minister Xanana Gusmão the Ministry of Petroleum and Mineral resources (MPRM) was established. This ministry acts as a project owner of Tasi.Mane project and through Timor Gap it manages and organizes the day to day activities. After 2012 the contract regimes have not had any significant change. The only significant change, happened in 2015, is that NPC includes 25-35 percent participation of local or national firms in the terms of contracts within the Tasi-Mane supply base clusters.

To add, in the approved 2015 state budget, \$441 million was allocated to the development of major infrastructures, while \$516 million was allocated for goods and services which include building of petroleum infrastructure supporting projects in Tasi-Mane. The government has planned to spend more than US\$3 billion on infrastructure development in the period from 2014 to 2018, with roads, Tasi-Mane development and other transport being the three largest programs. These major infrastructure projects have been funded by the Timor-Leste infrastructure fund and loan from Asian Development Bank as well as from other bilateral cooperation (World Bank and MoF, 2015).

5.1.2 Key actors in the Tasi-Mane cluster project

This part shortly illustrates the development of the Tasi-Mane cluster projects from 2011 to 2015. A greater attention is paid to the key groups of government and business protagonists that have influenced the development of Tasi-Mane cluster projects. These actors consist of Council of Ministries (CoM), CAFI, and MPMR; line Ministries for example; MPWTC, MPS, AND, NPC, Timor Gap Ep., International contractors, CCI-TL/business association and national contractors. Their roles and relations among them are presented in figure 5.

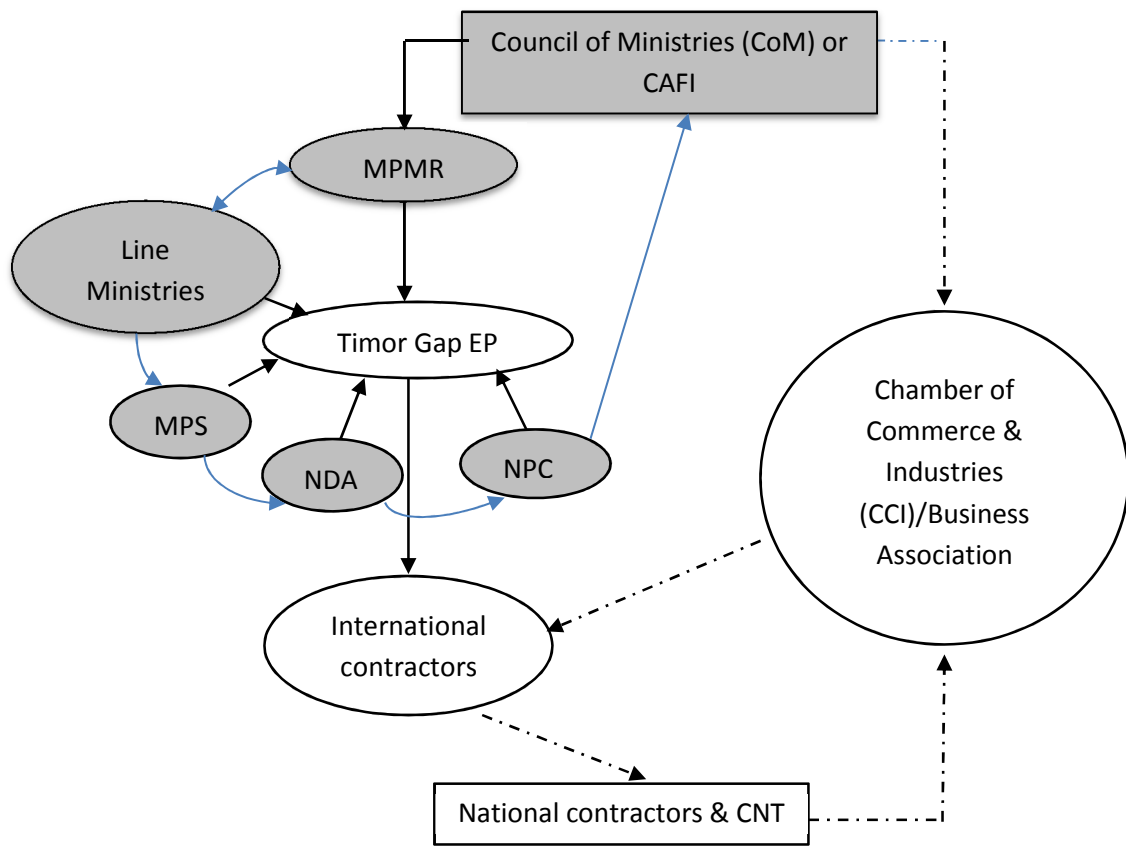


Figure 5 Main government, business, and public agents molding the development of the Tasi-Mane cluster project (the condition at the very beginning of 2011, authors own interpretation).

5.1.2.1 Council of Ministers (CoM) and CAFI

Today the Council of Ministers constitutes of 17 Ministers which are led by Prime Minister (within VI constitutional government) and have the right to vote in the meetings. This government body has the legislative power and makes important decisions in connection with the program development of the country. Since each cluster project in Tasi-Mane exceeds \$5 million; according to the decree law number 8/2011 about entities entitled to authorize procurement procedures, CoM is the one who has competence in giving the final approval. They already approved the Suai Airport, Highway, Supply Base clusters and other projects that have been carried out by the international firms.

The Administration Board of the Infrastructure Fund (CAFI) is composed of ministries representatives with some permanent members such as the Prime Minister as a chair, Ministry of Finance and Ministry of Infrastructures (MPWTC), who have competence according to decree law number 8/2011 to approve the projects from infrastructure fund between \$1 million to \$5 million USD. CAFI is responsible to guarantee security in the negotiation process and contracting of Tasi-Mane multi-year projects and ensure the financing of Tasi-Mane project.

The Major Project Secretariat (MPS) is created under the decree law number 8/2011 to perform the preliminary and formal appreciation concerning the Tasi-Mane project, when Tasi-Mane was developed; MPS is responsible for review of the whole project including conducting its socio-economic studies since Tasi-Mane is categorized as major project. When MPS finishes the review process the project is passed further for verifying to NDA and to NPC to process the biddings.

5.1.2.2 National Development Agency (NDA)

NDA is responsible for rationalizing the available financial resources through a rigorous assessment of the projects, based on a cost-benefit analysis, and controlling for the cost and quality of capital development of Tasi-Mane cluster projects. Originally NDA is placed under the supervision of the Prime Minister that integrates the direct administration of the State. In new government structure NDA has moved to newly established Ministry of Planning and Strategic Investment. Under the government decree law number 11/2011, NDA is responsible for reviewing the merits and feasibility of capital development projects, supervising, verifying and certifying capital development projects, as well as their execution, in coordination with the relevant ministry (Journal da República, 2011).

5.1.2.3 National Procurement Commission (NPC)

The national procurement commission is a procurement entity that is responsible to provide better procurement services to Timor Gap E.P, MPMR and MPWTC to Tasi-Mane cluster project and other large infrastructure projects, as well as achieving transparency for the Tasi-Mane procurement process. The purpose of the NPC is to carry out procurement procedures for projects worth at least one million dollars as well as to monitor and provide technical assistance to other procurement procedures done within the scope of all public entities. Provide technical assistance and advisory to procurement procedures up to one million dollars and to collaborate with the National Development Agency, the Large Projects Secretariat, ministries and other public entities according to the law number 14/2011 (Journal da República, 2011).

5.1.2.4 MPMR and Timor Gap

Timor Gap as a national oil company has received responsibilities from the Timor-Leste government via MPMR to manage and administer day to day Tasi-Mane petroleum industries project activities. It is also responsible for petroleum downstream projects which have interest of gaining experience as well commercial and economic interest. In this regard, MPMR is the owner of the project and Timor Gap is representing them and coordinates other actors such as international contractors, and CCI-TL. Therefore, Timor Gap also has a role in shaping a contractual regime in the context of Tasi-Mane clusters project. According to the data that I collected Timor Gap has acted according to their merits and expertise and have provided advice for NPC and international contractors. One of the advices was to include the participation of local companies at 20-30 percent of the contracts.

5.1.2.5. International Contractors

These are the group of international firms that participated in bidding process and won the projects. All of them can be characterized as competent construction companies that have sufficient financial sources, equipment and relevant experience. For example: PT. Waskita Karya, Tbk from Indonesia is building the Suai Airport; Chinese Company Covec is developing a highway; Hyundai Group - HDEC-HEC-AMCO Consortium (Korea) - Hyundai Engineering & Construction Co. Ltd / Hyundai Engineering Co. Ltd / Hyundai Amco Co. Ltd from Korea are building the Suai Supply Base. Many international contractors that have got contracts are currently undertaking preparations and conducting environmental studies. For example Waskita Karya has been working in Timor-Leste in building roads, bridges and other building during the

occupation period. Waskita Karya provides the training and learning of skills related to constructions and management to the local and national firms.

5.1.2.6 Chamber of Commerce and Industries Timor-Leste (CCI-TL) and National

Contractors

The Chamber of Commerce and Industry of Timor – Leste (CCI-TL) is the foremost Chamber of Commerce and an umbrella organization representing business associations in Timor-Leste. CCI-TL has branches in municipalities, including 3 municipalities located in the Tasi-Mane cluster projects area. CCI-TL was established following the National Congress proposition in 2010. The objective of CCI-TL is to represent the needs of its members in policy advocacy and deliver a range of business services to enhance the skills, knowledge and performance of the national businesses it represents to achieve private sector growth. Since Tasi-Mane project developed, CCI-TL has joined with 19 members of associations and organizations where most of its members operate in civil constructions and public works. One of CCI-TL member associations is national Timorese consortium (CNT) which is composed of strong national construction firms who leverage their resources in terms of equipment, finance and management to handle larger projects like port, bridge, road and larger buildings. CNT have experienced building the first large bridge (Comoro) in cooperation with Indonesian state construction company Wijaya Karya (Wika) in 2012. Companies situated in the Tasi-Mane areas are also potential partners and sub-contractors that may benefit from international firms. These national contractors have experience in construction of roads, bridges and buildings with very basic equipment and limited personnel in terms of engineers and skilled staffs. Many of these national

firms have formed joint ventures to leverage resources and capacity to handle larger projects in Tasi-Mane area in the future.

5.2 Interview results

The interviews have revealed a number of problems that government authorities, international firms and national firms have experienced through the contracting process and a number of suggestions in order to minimize them have been proposed by respondents. In order to present the holistic picture of the process and development of Tasi-Mane project I will present the findings in the following order. First, I concentrate on the revealed barriers that hinder the successful contracting process. Secondly, I present the goals that Timor-Leste government set up for the facilitation and maintenance of big infrastructure projects. Thirdly, I present the processes that are implemented today. Finally I present some of the suggestions that arose in the interviews with the respondents on how they see the development of big infrastructure projects should undergo in order to involve the national firms and achieve the goals the government sets to itself.

5.2.1 Barriers

To answer the aim of this research, this chapter is divided in several sections. Firstly, there is amount of barriers and problems that national firms possess themselves that hinder them from active participation in the Tasi-Mane project. Secondly, there are barriers that government has introduced and that appear to be unfavorable to the national firms. Thirdly, there are challenges for international firms in terms of recruiting national subcontractors.

One of the problems revealed in terms of national firms is lack of competence and knowledge.

This refers to lack of education, training and experience from both firms and employees in these firms in Timor-Leste. The current situation is a result of previous lack of education. At the same time there is a lack of vocational training centers that provide skills for people to meet market needs, especially in construction projects. Construction works in Tasi-Mane have different difficulty starting from the land clearance to sophisticated engineering work; hence people with different skills are required in different levels of construction project. In fact, there have been several vocational trainings, and university courses, however their capacity is small. Timor-Leste national firms faced this issue when they participated in the bidding process and when they formed joint ventures with international firms. In many cases government was not giving the priority to national participants. International firms lack trust in national firms due to previous negative experience, which revealed lack of understanding and experience. The same issue is right for the bidding process, where national firms get worse scores in experience, knowledge in constructing a supply base, airport and highway constructions.

National firms on their hand have pointed that the current banking system is not allowing for obtaining a guarantee needed for the bidding process nor investments for the development. A respondent stated that:

“The local businesses find it very difficult to get credit line, to be able to start a contract, so when the government awards a big contract, the payment may not come until some of the work or the whole job is completed. But you have to spend a lot of money before that, so the company who wins the contract must have a credit line from a bank to be able to remain the milestones, to start building before the payment comes, and that’s a very useful way of operating. In Timor-Leste, if you are a local business, it is very hard to get the credit come from the bank.”

One of the findings is that national firms must have capital to fulfill requirements which is 1 million USD in cash according to bidding requirements. Very few Timorese companies participate in the bidding rounds when they are open for international competitive bidding. The reasons for that are the lacks of money needed to proceed, being unavailable to borrow money or

get a guarantee in a bank. Banks express low trust in Timorese companies due to land and properties are not regulated sufficiently and other warranties issues. Timorese companies on their turn feel that the bureaucracy and criteria established by the Bank are too high and processing time is too long. The current situation with Timorese banks has not been taken into consideration by the national government in terms of specifications and requirements to potential contractors. National firms therefore complain to the lack of support and understanding as well as impossible requirements to fulfill. Banks in Timor-Leste operate mainly in the capital – Dili. There are three foreign banks and one national commercial bank.

On the other hand, government authorities have been pointing to the previous negative experiences with the national firms. It has been revealed, that after winning a tender and signing the contract, the national firms have sub-contracted the whole contract to the international firm with the reduced price. Thus the goal of the government in increasing of competence and experience of the national firms has been jeopardized. A member of government stated that:

“It’s very sad that national companies sell their project in order to gain 10%. Government has projected that 10% is what they will get when they finish the work. If they take 10% and sell it to international firm, then how many percent that international firm will get after concluding the work? This will automatically decrease the quality of work”.

From the previous projects, the national firms have not build the legitimacy and trust, therefore one of the reasons why none of the national firms got any part of the Tasi-Mane project is a problem of work morale. This issue has been taken up in many discussions both on political and civil society’s level that Timorese firms have not been implementing quality construction projects, even though the government has clear intentions to provide them small scale projects in order to build their capacity for handling bigger projects in future.

However, when the national firms sell the projects to international firms they automatically reduce the quality of the project, due to international subcontractor will also want to gain some

profit and thus reduce the cost of the project through cheaper materials, labor and so on. In addition, international companies employ many foreigners and not Timorese employees, import equipment and do not produce ripple effects in local communities. Government authorities become suspicious and unwilling to make favorable conditions for national firms.

Even when international firms want to subcontract or employ the locals to do the “easy” work like bearing stones, the lack of education and language skills, like the English language, makes it difficult to employ them. The country’s two official languages are Portuguese and Tetum. The last one has a number of dialects and differs from municipality to municipality. Thus one of the respondent’s states:

“We have tried to solve some of the language issues; it seems to be a small problem but it is a very important problem because these people will have to become our employees and in oil and gas industry English is a basic language.”

International firms face language difficulties when they enter the Timor-Leste business market. Lack of communication makes recruitment of local businesses and finding national partners challenging.

Current government arrangements around the participation in the Tasi-Mane project are also less favorable for the national firms.

In the **pre-contracting period**, the national law is not favoring the national firms to participate in bidding process. As mentioned before, each project exceeding one million dollars should go to international competitive bidding. A respondent stated that:

“the government has certain sealing and as for law, if it is more than 1 million then this project will advertise in ICB then we need to invite the international firms, now for this kind of projects was basically as designed building project and only ICB contractor can do this job”.

The requirements for the amount of technical equipment, financial guarantees and relevant experience are not achievable for national firms today. Some of criteria are almost impossible to

overcome, that in their turn reveal an immature banking system rather than lack of interest from national firms. One of the respondents adds:

“If we are talking very generally, for the projects less than 1 million USD we assume that locals can do that but more than 1 million, why the government turns to international bidding? Because the locals don’t have the capacity right now.”

Also national and international firms have been mentioning that the process of making a final decision is not a transparent process. First of all, a number of ministries and departments involved in the contractual arrangements do not follow the recommendations of each other and make their own decisions during the process. Thus, one local entrepreneur experienced that the ranking of the bidders was not made according to the recommendations. The decision making process was unclear and not fully transparent, though government is involving competent international consultants in the choice process. Government on their side claims to follow the international rules in the bidding process. For example, one of the respondents, who have delivered the bid, a representative of a strong national firm, gave the following comment:

“Charles Kendell and Partner/NPC, they are the ones who evaluate all these international tender criteria. They have done their work, but when it goes to CoM or CAFI that’s when things fail. I witnessed that when they came in, everything was working very nice in the tender processing, and then what can they do? They do not say that this is the winner; all they do is just sorting out and giving numbers to the potential contractors. For example number 1 with highest technical and financial characteristics, then number 2, number 3, 4, 5, 6. The government then decides. It is supposed to go to number one, logically speaking, but political intervention they will not give to number 1 they give it to number 6.”

Other respondents made similar quotes and demand more transparent process to avoid misunderstandings.

When it comes to **the contracting period**, the number of national firms that have been getting a contract in Tasi-Mane project over 1 million USD is equal to zero. That means that no national firm has got any contract solely or in collaboration with international firm through the tender

system so far. Therefore the opinion of international firms is provided here. International firms complain about the content of the contracts. They mean that contracts are too general and do not provide the information of what and how the planned infrastructure should be made.

Also some national firms provided me with the information that the government does not possess enough expertise when ordering the materials and specifications in the contract. For example the area of Suai, according to one respondent has too soft ground for the flight to land and needs to be strengthened with other type of stones. However, the government is determined that the contractor should use the local stones found in the region, despite this fact was pointed to them.

A respondent stated that:

“the stones that are used in airport of Suai are aggregates for a runway, so when the plane lands the pressure that it gives in that moment, it’s impact is huge, so we have to have really good base of cutting a runway in order to make good investment and this material does not exist in that area. And the government said, no, you have to use that material, so it’s our obligation to explain you that if you use the product that is there it is not going to last long, you are going to spent more money maybe in five years to renew the runway again. So there is a good and bad side there, because the project is in Suai you must use everything from Suai, which is good for the local economy but when you talk about materials for the construction that will not necessarily work.”

National firms complain to the lack of involvement and have recently forced the government to include the additional condition into the contracts, that 20-30 percent of the contract should be given to the national firms. However international firms state that the formulation is unclear whether the 20-30 percent should be employees or whether 20-30 percent of the contract should be subcontracted to the national firms. International firms, on their hand, have sent signals that if the contract will have more than 30 percent of national firms’ involvement their interest to participate decreases dramatically. It seems that the international firms do not have enough trust in the national firms of Timor-Leste and are not interested in subcontracting and educating them:

“No specific local content implementation, but there is a term in the contract to include local companies, it is written in general term, and bidding document it is usually specified in the

methodologies of the works where we must involve local labor and how much. However it is not very specific whether you must hire Timorese people, and how much or you have to acquire goods and service in this percentage”.

In **Post contract period** previous infrastructure projects have been experiencing some problems. For example several respondents mentioned the bridge project where the winning international firm has not been starting the building of the road in time due to some financial difficulties in a period of two years. A respondent stated that:

“a road construction from Dili to Liquica, I think was around 30 million dollars, all the local companies have a bit of difficulties in meeting those criteria, so Spanish company met all the criteria and was hired, but then it took them two years to start, until the government actually told them, look, are you going to start or we are going to cancel the contract? And then the issue appeared that they were still looking for financing, so basically what is happening, you know, giving to foreign companies, because they meet all the criteria but the foreign company does not have the financial capacity to do the project. In the end they are now sub- contracting to local companies again”.

International firms experience difficulties in transferring the needed equipment to the place where the project should be built. National firms that could have been sub-contractors do not possess the necessary equipment and knowledge to assist the international firm in this area. Local firms are hardly 10 years old and do not possess heavy equipment and cannot run a project like Tasi-Mane. In some cases, companies that possess heavy equipment lack knowledge to operate and maintain it. Therefore they are forced to look for an outsider that can operate it. In some cases equipment is rented from other companies. National companies are then often disqualified from biddings because at the evaluation round it is revealed that they do not possess adequate equipment and competent personnel.

Another issue of the Timorese government is the lack of long term thinking. A big amount of finished projects has not been assigned to any department and stays without maintenance today. Thus, several roads have been damaged after reparation process was finished as well as

infrastructures which can no longer be used. Therefore, national firms reveal a doubt on who will maintain the Tasi-Mane project after it is built and whether it will replenish the treasury of decaying infrastructures in Timor-Leste. After the critics of national firms, government have included the current contracts that have awarded to International firms with maximum 3 year of maintenance including the period of deflection before government look after it:

“The big problem in Timor-Leste is that we do not have money for maintenance, that’s why we see everywhere that the roads have narrowed from the post-independence time until now, not only roads but also bridges do not have maintenance, once a small hole gets deeper, we are not going to rehabilitate it, but we built the new road construction”.

The responsible body for the day to day operations – Timor Gap doesn’t have any decision power whether to involve national firms or not. All the decisions are made by Ministry of Petroleum, CAFI and Council of Ministries. A member of staff from Timor Gap states:

“...as a state oil company, we have been delegated the administration and management of the whole Tasi-Mane project on behalf of the government or the Ministry of Petroleum. So the government remains the owner of the program, but on day to day basis it is Timor Gap that administers and manages it. Now, in the implementation of various sub-projects under Tasi-Mane project, it will depend on the type of activities, and project will be done through for instance one of which if it is construction we need to kind of invite the multinational companies to come and contracted out to be to essentially to do constructions work, the designing, the consultancy work are normally been outsourced and essentially Timor Gap for its part managing and for administer those activities on behalf of the government”.

The summary of the key barriers in the contracting regime in Timor-Leste is presented in table 3. It is organized from the perspective of national, international companies and government authorities.

Table 3 Summary of key barriers of involving national firms in Tasi-Mane Project

	National firms	Government	International firms
Key barriers	<ul style="list-style-type: none"> • Lack of equipment/Machinery 	<ul style="list-style-type: none"> • Planning/division of project in sub-projects 	<ul style="list-style-type: none"> • Language
	<ul style="list-style-type: none"> • Lack of knowledge, education 	<ul style="list-style-type: none"> • Bidding process organization and implementation 	<ul style="list-style-type: none"> • Problem with finding the local labor/ national firms (subcontracting)
	<ul style="list-style-type: none"> • Lack of financial guarantee from local banks 	<ul style="list-style-type: none"> • Difficulties in writing up a contract 	<ul style="list-style-type: none"> • Problems with contract – needs more development
	<ul style="list-style-type: none"> • Wrong enforcement/failure to comply with the conditions of the contract 	<ul style="list-style-type: none"> • Lack of enforcement 	<ul style="list-style-type: none"> • Time consuming to start the project
	<ul style="list-style-type: none"> • No guarantees given for the work done 	<ul style="list-style-type: none"> • Lack of national firms that are up to the standard 	<ul style="list-style-type: none"> • International companies are not interested if the % of local content is high
	<ul style="list-style-type: none"> • Low work morale 	<ul style="list-style-type: none"> • Business involvement 	<ul style="list-style-type: none"> • Employing more foreign staff compared to locals

Goals of the national firms’ participation

Different government authorities understand differently the goal for national firm’s participation in the Tasi-Mane project. While one part wants the competence building and active involvement of local firms, others are sceptic due to the difficulty and scale of the project. They have made some negative remarks as well.

When we turn to firms, both national and international firms consider the participation of national firms in the Tasi-Mane project as important.

Almost all CEOs of national firms, representative of the Chamber of Commerce and Industry officers argue that the participation of national companies is very crucial for local and national economic as well as for future possibility to become self-sufficient in terms of financial and technological development. Respondent states:

“It is very important; Timorese can gain some money and knowledge too. And any infrastructure done by the government stimulates economy, so it is very important, so the main job of the government is to invest in infrastructure because we see there is an economic value”.

Both national firms and Chamber of Commerce also expressed that to be part of the Tasi-Mane project can equip national firms to gain experiences and increase the competitiveness:

“I think, this is good, because you will get the experience from all other companies who have been doing this work for a long time, what could be a shame? It would be if they came and did the project and left, and the Timorese businesses will be no better off. It will be better if we could do a part of contract to do the work and they actually would involve the Timorese businesses community and teach them. So when they leave, the Timorese businesses can step forward”.

When it comes to government’s point of view, as a project owner, several government members do not understand why national firms should participate in Tasi-Mane project as they have their own view of the question. A member of government states:

“Timorese must get more benefit and profit or money from this project. But it is a process, probably we have to wait until 10 years to get ready and probably within 10 year time some Timorese firms will be good enough”.

In addition to this, several government officers revealed that it is good to involve national firms in the Tasi-Mane project which they think should be the whole purpose of the project. Capacity development, employment and business opportunities for Timorese can be realized within this project; however the Timorese firms should change their performance and behavior in order to be able to build their capacity over time:

“Their participation is very important, if we don’t involve them then who is going to involve them if not this government? But national firms have to stop selling their projects, and start learning how to execute the project”.

5.2.2 Means

Several respondents expressed that to reach maximum participation of Timorese companies in Tasi-Mane project the government should have established state owned organization and

involved consultancy companies before they launch mega projects. In this case it might have secured the participation and knowledge transfer from international companies:

“There are two ways to do the jobs; whether we need to relax the criteria in order to involve nationals, however we have already relaxed the criteria, we cannot relax more. Further, we need to build 2 or 3 big crown companies in this country so that they can do the job. Your country has only established one crown company so far, you can establish similar crown companies in construction, and consultancy companies whether it takes money, resources but the capacity will automatically increase”.

Making the criteria more flexible and tailored to the local context and making bidding requirements easier for the national firms have been expressed by several respondents. It would increase the number of national firms to be eligible for tenders. The most successful national firms also expressed that they already possess the necessary equipment and human resources. However, they do have a constraint in form of lack of financial capability, and no possibility to obtain a guarantee from local banks. According to them this is the government’s role to establish a bank for these purposes.

“I think the government should be a little bit more flexible towards the local companies, I mean our government must understand that we are a new country, they must recognize that our companies were started from zero also in financial part. For example, foreign companies they did not have any trouble in getting financial support from the bank, like reference, like financial guarantee from foreign institute. For local company that is the most difficult part because there is no any institution here in Timor at the moment that can actually support the local companies, and that was one of the factors”.

Several respondents from national firms and procurement body also mentioned that the government could provide some training in how to participate in bidding process and in project management to national firms in order to increase the experience and probability of the national firms to submit the necessary documents for tenders.

Several respondents from the Chamber of Commerce and Industries agree with the national firms and propose that government should find the solutions on how to help the national companies to

lend money from the bank. Another task they see the banks are capable of providing to national firms is training, for example in terms of solving the property rights.

“in the short term, the banks that lend the money need more information from the Timorese businesses to give them some confidence that the money will be safe after being loaned until they are paid back and we need some more training for local businesses, so that they can provide the information to the banks, to be able to have some confidence to lend some money, and the government could accept a longer waiting process on letting contract to consortium that involves local business, so international business, and local business have a stronger waiting to try to encourage the skill to have transferred. But in long term, property rights, that is single biggest barrier to get the businesses growing. Having existed to money to be able to grow and start up their businesses something that the banks can lend money”

Several respondents have also expressed that government should be transparent in the whole process of procurement. National firms have been repeatedly saying that government sometimes does not consider technical part, sometimes the decision is made on fulfillment of requirements and sometimes on something else. They basically question how the process of procurement undergoes and want transparency at all stages. They consider the current process of project development and procurement to be too complicated. As a result many projects have not been executed properly and do not get appropriate maintenance.

Finally, the respondents state the lack of coordination between the key stakeholders in the Tasi-Mane project.

5.3 Theoretical analysis and discussions of my findings

In this chapter I analyze the data presented in the previous section with the following theories: new institutional economics (NIE), new institutional sociology (NIS) and agency theory. The historical development, relevant actors as well as their actions and influences will be discussed in order to reveal the factors that are enabling and hindering the national firms from participation in contractual arrangements like big infrastructure projects. Lastly this section concerns about the

actions undertaken by government in their efforts to balance short-term quality and speed of building of Tasi-Mane infrastructures versus long-term capacity building.

5. 3.1 Development of contractual regime and political tendencies

Timor-Leste's politics and institutions play an important role in understanding the degree of participation of national firms in Tasi-Mane project through its development of contractual regimes. As Williamson (2000) pointed that the institutional environment can cover a lot of ground, and that, its characteristics are very pivotal to analyses or investigations of the nation's progress (North and Weingast, 1989). Thus, the main concern of economic history is to consider the change/evolution of economic and political institutions that initiate an economic environment which in turn increases productivity (North, 1991). This study covered the last 13 years (2002-2015) of development of the contractual regimes in Timor - Leste and its economic development. These years have been turbulent for the country. It has been dependent on the international financial sources, as well as advisors and military forces. The government has been trying to adopt the best management practices from the western countries; however these were not translated to the current realities. For example, the government has been giving out contracts through ICB mechanism and set up the requirements for participation in it. However the immature banking system was not considered as well as challenges with the procurement law, which hinder the participation of national firms in ICB. Thus, only the government possesses enough resources to initiate big infrastructure projects. The ambitious plan of the Government of Timor-Leste SDP 2011-2030 proclaims that the country will become a medium income country until the year 2030. However current projects towards the implementation of that plan are not set up into a set of coherent projects. On one side the government wants to reduce the

unemployment and poverty in the country. On the other hand the national firms are hindered from the participation in the big infrastructure projects, and the possibility of their employment, capacity building and gaining experience is limited. Also, there is a lack of arena for national firms to be able to be involved into negotiations. It also hinders the government to communicate with the national firms and reveal the full potential of it. Thus the organizational field is weak and each actor seeks to maximize their own interest rather than achieving mutual goals and engaging more actively into negotiations. The institutional logic of key actors remains challenging as the institution itself (Lounsbury, 2008).

5. 3.2 Key institutional actors

The findings revealed that the key actors presented today in the infrastructure project of Tasi-Mane are different in their power and maturity. The governments national petroleum company Timor Gap has been established in 2011 and is still young and lacks experience. The national firms are also immature compared to international competitors. The governmental institutions change rapidly in Timor-Leste and shape the current contractual regime as well. The situation described in the previous section refers to DiMaggio and Powell (1983) and Powell et al., (2005) as emerging organizational field. Within this young and immature organizational field there is still a lack of interactions between the actors which in turn introduces challenges and barriers to all involved parties. However some developments have been revealed. For example Timor Gap serves as a “bridge” between the contractors, subcontractors and government. There is also lack of coordination and some conflict situations have been described. The next step according to DiMaggio and Powell (1983) would be an increase in the information load between the organizations in this field. National firms and international contractors have already shown the

interest to be able to get the transparent bidding process and better information about the projects. The last step, developing the mutual awareness, is not realized yet. As it was said before each actor is still acting in own interest and is not trying to involve others or introduce the mutual goals. The absence of the defined structure and roles in the field makes it difficult for the further development of it.

In this study a premise or assumption is created that the actors can be featured as what (DiMaggio and Powell, 1983; Powell et al., (2005) “*emergence of fields*” or what they call **totality of relevant actors** “*connectedness and structural equivalence*”, or this could be also partially explained as institutional arrangement/structure that formed in the institutional environment as play of the game (Williamson, 1985).The intended governance structure considered here is composed of government/state bureaucracies, business firms, nonprofit organizations, long-term contracts, commercial contracts and other related contractual structure/arrangements Williamson (1996).

These protagonist groups around the Tasi-Mane project are consisting of Council of Ministers and CAFI, MPMR and Timor Gap, MPS, NDA, NPC, International Contractors, CCI-TL are the main dominant/authoritative group of actors that are connected and interested to Tasi-Mane project. As an outcome of their forces/pressure on national firms/industries participation and their interaction, creation of new decree law or rules for national firms as a process of institutional most probably discovered. Lounsbury (2008) institutional logic of the key protagonists offers a feasible way forward or solution to comprehend the motivation force for their actions and manners and also their influence or pressure towards national firms/industries. The main actors for the Tasi-Mane downstream petroleum infrastructures supporting project is central government, Timor Gap, and International Contractors with the following discussions:

The central government authorities (with the support from CAFI, MPS, NPC, NDA) influence other actors through legislation and ownership via MPMR as presented in the empirical parts. The change after the 2006 and 2007 political and military crisis or the period from (2008-2015) during Mr. Xanana Gusmão Prime Ministerial period this is the era of infrastructures development this can be characterized as a period of double digits economic growth or “stable state”. With the slogan “welcome development and good bye conflict”.

Centralization of government, growing infrastructures development and providing infrastructures for national industries, growing control over strategic investment, and its ambitious 20 years Strategy Development Plan and development of Tasi-Mane project are now showing a new born of development for the bright future of the country. The first state national oil company Timor Gap has just established at the time they have provided with the role for just to manage and organize day to day management of Tasi-Mane project. Moreover, from this period of development there was no single state owned infrastructures companies established at that time, hence, most of Timor-Leste major infrastructures projects including Tasi-Mane clusters project have been awarded to international contractor/firms actors. Yet, it appears that in connection to Tasi-Mane project, both government through MPMR and Timor Gap are at this level encountering what we might express short-term quality and long-term capacity building dilemma. Do they able to engage national industries/firms involvement to secure the national interest of growth and will they able to secure Timor Gap interest for the same interest if the cluster projects continue implement by the international contractors. As my empirical findings shown from the very beginning, the challenges appear lack of legislation, incompletely developed policy that enhance national firms participation in big infrastructures project, and financial scheme from banking sectors, lack of enforcement, lack of mutual coordination of

building education and skills training dealing with use of technologies and equipment, and lack of interaction among them hence, this have raised possible conflict between central government and national firms and international contractors with national firms, and possible conflict between government and business associations and local firms in the Tasi-Mane clusters area. To overcome these challenges, it may requires to minimize the institutional environment constraints, by promoting inter-organizational network approach of Laumann et al. (1978) and institutional totality of relevant actors (DiMaggio and Powell, 1981). In consequence, opening the door for international companies and by not focusing developing the national competence in terms of experience and finance have not been enhancing the national firm's to be part of the international projects. This may describe slow Tasi-Mane project clusters implementation and still very limited assistance or support to national firms /industry from the central government side.

Timor Gap was mandated by the Timorese central government via MPMR to administer and manage the whole Tasi-Mane project and Timor gap assists and provide support the development of the knowledge and preparation of human resources in order to efficiently operate the petroleum sector and to support the creation of Tasi-Mane petroleum industry. As a new oil company, Timor Gap has prioritized needs of capacity development, foreign investments, knowledge/experience and technologies to develop Tasi-Mane petroleum industries. In this setting, Timor Gap gaining experiences as managing body, but the company has not provided with strong power to influence directly to Tasi-Mane petroleum industries and national infrastructures firms, as DiMaggio and Powell (1983) pointed that this might lack of strong forces that emerge to lead national industries to become more similar to other actors in the field. The control and power is still remaining with the central government through MPMR which is also as project owner wherein most of the Tasi-Mane petroleum industries still financed/funded

directly from the Government Infrastructure Fund supervised by the Administration Board of the Infrastructure Fund (CAFI). Yet, in practical work in the field MPMR and Timor Gap have greater opportunity in position on shaping and influencing the local or national contractor/firms participation as in this case both MPRM and Timor Gap together as Tasi-Mane project developer, as a result they exercise a high degree of control over its partners international contractors. Timor Gap relationship with national firms in current Tasi-Mane project is very weak; the data that I collected shows that none of national firms/industries consulted and participate in the Tasi-Mane project development. National firms and its business association have been established and being presented in the region before Timor Gap was established and before the Tasi-Mane was designed, hence, they are in the networks in that field (environment), business association was recognized by the governments to be the partners of the development. This can be characterized as what (DiMaggio and Powell, 1983; Powell et al., 2005; and Morrill, 2007) the emergence of fields forms as totality of relevant actors or this could be also partially explained as institutional arrangement/structure from the private firms that formed in the institutional environment as play of the game (Williamson, 1985). In his situation, MPRM can design/develop the project which is involve as many of these national firms as possible in to the Tasi-Mane project, they could also receive support from MPMR or central government and Timor Gap, or they have to have same level of development of international infrastructures companies (whether through consortium or joint venture or through pre-qualifications filtering). Even International companies who win the international competitive bidding, according to the data that I collected, they cannot do the job by their own they need national firms. International bidding competitive which is involve the international companies with adopting very high international standards may lead the government/MPMR and Timor Gap to reduce their control

of infrastructures development in Tasi-Mane, for instance; government now cannot control the implementation of local participation clausal that impose to international contractors.

The main International Contractors operate in Tasi-Mane such as PT Waskita Karya, Tbk, Hyundai Group and Covec due to their infrastructures development experience, financial power and technologies may be characterized as competent business partner. Yet, to some extent executing project in Timor-Leste, these companies has to follow Timorese rule of the game, establish by the project owner authorities, and NPC in terms of standards, specifications, local content, capacity building and contractual agreements. The work of International contractors if considering national firms (local participation) under such pressure can be characterized what (Meyer and Rowan 1977; and Lounsbury 2008) call as institutionally rational, maybe with this direction of furnishing the Tasi-Mane area/regional development legitimizes firstly MPMR/Timor Gap and secondly international contractors in the eyes of Timor-Leste national firms or business associations, or in other way the work of International contractors and national firms/industry can be partially be characterized as increasing in interaction among organizational in the field that (DiMaggio & Powell, 1983; and Scott et al., 2000) defined organizational group that involve in similar activities and are fundamental to common pressures regulatory and reputational. This kind of competence development can guarantee the maintenance of the project when all international contractor left.

In this discussion, assumption was made that the key actors can be characterized as emerging fields as institutional totality of relevant actors or partially characterized as institutional arrangement or governance structures. Therefore, to answer this research question (about development/political/ forces changing contractual regime with focus on Tasi-Mane project), this study shows that in the purpose of historical development/political changes, an institutional

arrangement/governance structure was established according to SDP and development of infrastructures needs, where government bureaucracy, and business firms administer relationship providing contract to other actors to make Tasi-Mane project happen. The central government through its MPMR and Timor Gap intend to decentralize their activities and tailored the ICB design building to international market by involving international contractors' actors and give very little opportunities to national firms, which is a sign of governance structure/institutional arrangement that transaction cost might high (Williamson, 1996). Partly can be explained by lack of capacity from the national construction firms and government try to offer and have control on international actors with the objective to get jobs done faster from international contractors in which value of money (quality project) considerable as the reason.

To sum up, the situation in which national firms with its business associations and organizations found at the time this study conducted they felt it very difficult to participate in the projects. Several changes has occurred in contractual regimes since 2005, the changes are all about defining authorities competence procedures and the formation of national institutions to oversee the infrastructures funded project and other public projects. The contractual regime has not committed emphasize rigorously on how the national industries part of the international projects. The very high Tasi-Mane project requirements in the bidding document have not giving room for national firms to be part of the Tasi-Mane project from the very beginning of bidding process. The findings were that the Tasi-Mane project has been slow due to the lack of national people skills to make it happened both from private and government sides. It is not negligible that government in fact has offered so many projects bellow 500,000 USD to national industries previously but the capacity has not built as expected. At the same conditions, very little support

Table 4 Summary of key actors, their roles, interaction, and implications for national firms

Characteristics			
Actors	Key roles	Interaction/reciprocation/interplay with others	Implication for National Firms
Ministry of Petroleum and Mineral Resources (MPMR)	Project owner as a representative from CoM, responsible for all decision making process and facilitating the decision making in CoM after hearing from MPC and NPC recommendations.	Project development actor (designer), inter-ministerial cooperation and community engagement in the project, as regulative authorities.	There is national institution for the support of private sectors (IADE), preparing decree law for ensuring national firms participation
Ministry of Public Works, Transportation and Communication (MPWTC)	Responsible for pre-qualifications process of national firms and maintenance roles after all Tasi-Mane project done	Filtering national firms and selection of contractor generally, and specifically in highway and airport development.	Provide small scale infrastructures project for ground learning and have regular meeting with construction contractors
ADN	Monitoring of physical construction quality control body and reviewing the merit and feasibility of capital development project	Supervising, verifying and certifying capital development projects, as well as their execution, in coordination with the relevant ministry;	No program to support national firms and very negative towards national firms
Procurement authorities; NPC	Procurement entity, responsible for procurement service to public entities, in this case to MPMR and Timor Gap E.P, Positive to develop national firm's capacity. Possible tensions with national construction companies	A relation between project owner, Selection of bidding document, selection of contractors based on ICB	Ensuring the local participation from the contract. Offering training on bidding document, project management for national firms
Timor Gap, EP (national oil company)	Mandated by the government to manage and organize day to day activities of Tasi-Mane cluster project.	Management and knowledge gaining interest since it's a new born oil company, and commercial interest. relationship with government authorities and international contractors	Not trust to local companies and no program to support to national firms
International Companies	Multinational contractors with high technologies developing the supply base, airport, highway, refinery, petrochemical infrastructures	Project executor or main contractor, relationship with national contractors and project owner	Support national sub-contractors, and engage national contractors to learn from them
Chamber Commerce and Industries of Timor-Leste	Public organization representing business association and recognized by the government as strategic partner for national development. Its members are the possible sub-contractors	Has been a government partner, play a role as a bridge between businesses (CNT, small and medium-sized) with government as well as with other key actors	Train national firms, linking members voice to government, develop strategic plan and implementing productive sector programs in the Tasi-Mane project area, for instance; hotel, restaurant, agriculture etc.

from the national government was provided to business associations and individual national firms. And state institutions were established to be responsible building competence of national firms and people for instance; SEPFOPE, IADE and Universities have not been maximize in linking with the development of Tasi-Mane projects, national firms had not been experienced in building airport, highway and supply base, refinery etc. However, such conditions were commented by the international contractors that local people and firms are lack of capacity and that difficult to involve them. But some international firms who already operate in the Tasi-Mane project try to bring ideas experience from the constructions. Involvement of Chamber of Commerce and Industries of Timor-Leste (CCI-TL) in the Tasi-Mane projects it remains silent, but they were established and do play a crucial roles and jobs in the existence of national firms/industries.

CCI-TL mandated by its members and endorsed by the government itself to play a role of linking and negotiators on behalf of the businesses and assist them to provide information about market and opportunities. The interest of the Timorese government and international contractors are facilitated by MPMR through Timor Gap E.P with NPC, which is by turns connected to other, national level contractors. The implications for national firms and interplay between the key actors are summarized in (

Table 4 Summary of key actors, their roles, interaction, and implications for national firms).

5.3.3 National firms' inclusion and exclusion in the formation of contractual regimes

To answer this question, it has been partially explained already in the analysis of political developments and from the question of the key forces hindering the contractual regime. The implementation of infrastructures projects and strategy development plan (SDP) may force the national firms to be established and be part of the strategy vice-versa national firms could be

ignored because government wants the SDP and Tasi-Mane project to be implemented. As presented in DiMaggio and Powel (1983) macro institutional pillars may be partially explained by the regulative pressure on organizational in the field (top down pressure) and coercive isomorphic pressure. For instance; high regulations in the bidding process, strict evaluations and procurement decree laws from government state actors that only in favor to competent international contractors and expectations of high quality work may prevent the national firm participation in Tasi-Mane project, moreover, there were several regulative pressures based on government evaluation from the previous experiences that they have carried out to national firms, the perspectives was that national firms were practicing inappropriateness of behavior, spending money on unproductive activities, and being consistently dependent on government projects, hence, this might prevent their ability to be part of the Tasi-Mane project.

On the other side, according to Scott (2008b) and Lounsbury (2008) broader regulative force can shape organizational behavior in order to be more embedding or grow themselves, for instance, the local participation clausal contract defined by the central government and Timor Gap especially for the Suai Airport, Highway and Suai Supply Base cluster project in Tasi - Mane even though the term was not so clear but it was providing opportunities for national firms to be part of the project, they have been offered a chance to get sub-contracting of activities as a result of the regulative shaping/pressure. Nevertheless, it was a little bit difficult for international contractors to implement that local participation clausal according to the data that I collected, national firms do not possess the requirements imposed by the government and international contractors. The local participation clausal is mandated from the government or derives from the procurement law; this can be characterized partially/to limited extend with DiMaggio and Powel (1983) regulative or coercive pressure (pressures from other organizations in which they are

dependent upon) and it can be fits with Laumann et al., (1978) connectedness that national and international contactors are tight with relational contracts. This pressure have a positive intention that when national firms get those chances they might learn from the international firms, because the more dependent on another organization, the more alike it will become.

Hence, as claimed by DiMaggio and Powel's (1983) relationship networks structured, field is an economic and social activity accepted area where among surrounding actors develops mutual relationships. In this case, the actors are international contractors, national firms and business associations as well as state bureaucracy including Timor gap. These actors may stand in the structure of relations as pointed by (Scott, 1991; DiMaggio, 1991) social or economic actors and other organizations not merely be participate in exchange relationship but they are postured in a network or in structural linkages that shape (put together their action in particular form) their actions and determine the limits of their possibilities. In relation to this, institutional field have played a role providing more detail explanation and possible solutions on how national firms can involve in the Tasi-Mane project. According to empirical data that I gathered, both national and local companies in the project areas have not been able to take part of the project because one another reasons, for instance; needs interaction among organizations in the field and a cultural habit of waiting someone to provide them project. The issue of interaction should be maximized among national firms, international contractors and government through the existing forum that has been created most especially national firms should more proactive in changing their behavior toward others. This can be explained that the relationship between the fields evolving structure and network dynamic needs to be established to create forward movement in describing organizations or actor's behavior of "one kind or another influence the actions of organizations of another kind" (Powell et al., 2005). The concept of this field can make interaction occurs and

influence on the decision of actors involved (DiMaggio, 1983), for instance, national firms and its business association should enhance/strengthening their linkages and show their positive behavior to influence government decisions. The institutional field could also as an arena for dialogue and discussions (Hoffman, 1999), key actors in Tasi-Mane arena such as; Timorese business associations, international contractors, government and Timor Gap may debate or negotiate a collective coalitions for common interest and field can organize as a center for interactions and information exchange (DiMaggio, 1983). By increasing interactions may allow participation of national firms in Tasi-Mane project.

Another way of involving in the Tasi-Mane project, national firms may change their behavior in terms of what other do and success in the field level. DiMaggio and Powel's (1983) normative isomorphic for example; when norms introduced during education are entered into organizations then they gain legitimacy from others. National firms may lend money from bank, may consider management as an important aspect, and they may hire professional skills entering their constructions work. This will improve their chance to be in the game, because the greater the reliance in using academic credentials to choose staff, the greater will be similar to other organizations (1983). Also the greater the participation of members in professional organizations, to more alike the organizations will be.

5.3.4 Key forces stimulating /hindering for formation of the contractual regime

In generally I claim that institutional drivers/forces for the formation of the contractual regime in Tasi-Mane projects are associated with the government infrastructures development - SDP that requiring development of Tasi-Mane move forward, regulative pressures, the interaction of different actor's shaping the organizational field. If the national contractors companies demand or desires to participate the Tasi-Mane project, they have to respond or behave towards these

institutional pressures with the following conditions; either in terms of proactive reaction/behavior to change it (try to improve performance, not being a lazy neighbors) or in terms of adjustment to the existing governance regime (catching-up) or process opportunities for change. The institutional arrangement (governance structure) can provide stimulations/motivation the possible national argument firms to separate/ disengage the practices (where they are from) to actively learn to imitate the other international contractors who operates in the same field. The conclusions that can be drawn (implications) from these three arguments are endorsed by the following justifications.

Firstly, the high pressure of the government infrastructures development - SDP that requiring development of Tasi-Mane move forward may be a reason for (North, 1991) political institutions to maximizing productivity in the setting of institutional environments, or this maybe a basis or a reason for (DiMaggio and Powel, 1983; Scott 2001, 2008b; and Morrill, 2007) emerging field of totality relevant actor. Pointed that to participate in Tasi-Mane project powerful/strong forces may emerge to direct them to become more alike or identic to other actors. National firm/industries in short-term may improve their objective/vision or develop promising practices for change. However, for the long-term purpose, organizational actors developing logics by creating rational decisions build around themselves an environment that impede their capability to improve further in later years (DiMaggio and Powell, 1983). Under the situation of infrastructure development and SDP implementation pressures, newly established national construction companies may begin to start learn to imitate one another's practices and experiences specially imitating from the international firms with mindful that this might efficient and rational to be part of the game in Tasi-Mane project. Those who are succeeds most are those companies often imitated. Similarly, Bacharach, Bamberger, & Sonnenstuhl (1996); and

Thornton (2002) suggested that enough resources and legitimacy to survive must be developed by new organizations and creating resonance between the logics or rational action of existing institutions, therefore, existing institutions could play a significant role in legitimating organizations in emerging field.

In specific case of emerging field, bringing solution to overcome the dispute that occur is actually not easy since “the greater the range and intensity of schisms, the more difficult will be the task of developing acceptable norms” (Greenwood et al., 2002: 75–76). However, to establish acceptance of new institutional governance structure/arrangement, national firms may cultivate avenue for change, deploy assistance from institutionalized actors, searching to suits into strong system (Beckert, 1999). Moreover, Reay et al., (2006) offer that national firms may endeavor demonstrate the new forms value.

Secondly, as pointed by Meyer and Rowan’s (1977) organizational ceremony and myths that high institutional force might pressure organizations to advance their formal structures and promote myths may partially explain that the institutional rules function gaining legitimacy, stability, resources, and organizations incorporate. That the more institutional rules and rationalized structure in given area/ domains will require network of local relation insist structure development to control and coordinate activities hence this type of structure will removed less efficient organizations where the organizational leaders and authority produce a very high institutionalized context. At the same time, Meyer and Rowan also presented that the pressure of high institutional regulative could influence/force the organization to create formal structures to encourage behavior of ceremonial in order to decrease control, formal review and evaluation of operational activities. The outcome of this could make the organizations legitimization applications demand to de-couple by those that have objective to maximize efficiency. National

firms that associated with Tasi-Mane project for example might be exposed or unprotected to that type of process or development due to high regulative force/pressure from Timor-Leste central government (for instance; laws and regulation that allowing for international competitive biddings where high requirement in bidding documents such as; financial guarantee, experiences, and equipment).

Thirdly, the interaction of different actor's shaping the organizational field, as claimed by DiMaggio and Powell (1983) an institutional field is a perceived domain of economic or social activity where among the actors they build relations, shape or put together their representation of actions and structure of social. Hence, in this driver, organizations that gather within one organizational field might become identical or homogenous as an outcome of development or change (1983). The state process of organization in a structured field or isomorphic development/change may be partially or to limited extend explained that by the fact is that organizations are fraction or the same environment. Yet, in the latest study underline on process to directing field DE-structuration (Lounsbury, 2008). This situation occurs when among actors provide pressure the organizational field. The actor's interaction was discussed in this research. In the opinion of the data that I collected, Timor-Leste national firms/industries pushed to relate themselves to various actors as a result turned to be similar in form and relations (isomorphic) with the other actors. So, national firms/industries should have to make an alternative because in the field level some actors are quite challenging. For instance, some national companies have courage that they will get sub-contracting from Indonesia and China's Companies in the ongoing Tasi-Mane project such as: Suai airport, Suai Supply Base and highway development where some government officials also stressed this during my interviewing. Some national companies

also believe that with the help from CCI-TL they will get contract from the government in the future. Other national companies may try to learn from their experience and from international contractors by improving their management also their financial capabilities.

5.3.5 Contractual regime balancing short-term quality versus long-term capacity building

This research question concerns about the infrastructures development in Tasi-Mane petroleum infrastructures and how its contractual regime can balance the Timorese capacity building to execute the development of infrastructures itself. As my empirical findings show the national industries' presence in Tasi-Mane project is almost absent and is certainly fewer than expected, because the lack of capacity to meet the requirements and to compete in international competitive biddings of the Tasi-Mane cluster project. To discuss this phenomenon, the combination of new institutional economy, sociology and agency theory are proposed to explain this question. The answer of this question has been partially provided from institutional' organizational field, and interactions among actors in organizational field in previous research questions, however, the macro pillar of institutional theories can be extended in this part of discussion to explain how policy making from NIE perspective can shape and explain human development in terms of education and training for building competencies in the area of Tasi-Mane petroleum infrastructures development and how Williamson institutional arrangement approach explains this question.

NIE and competence building

First of all, government of Timor-Leste is willing to include the national firms into the Tasi-Mane clusters project and thus help in wealth creation and reducing unemployment, as well as

knowledge and capacity building of national firms (Government of Timor-Leste 2011). This is then as motivations for government to establish different of national institutions for carrying out the projects, and at the same time to encourage/stimulating national business to be established and performed as government partners in the implementation of the Tasi-Mane projects. However it has not been an easy way as the analysis chapter has shown. As presented by Williamson's (1998) formal and informal institutional arrangement⁵ that to reach economic development the appearance of private sector institutions is a powerful determinant. This might interpreted that the Timor-Leste government is in authority to shape the national firms' chance to participate in the Tasi-Mane international project. As it emphasized that the successful of the state institutions are realized when they embedded in private firms constraints (p.1). According to empirical data that I collected, there emerge challenging situations as whether to build the Tasi-Mane cluster project or build the competence first according to western style of doing projects. However, this is a challenging for a small and poor country to develop its economy. The institutional arrangement gaps are presented. This is strongly correlated to a statement made by a government Minister that;

"It's all about tradeoffs, and that you have to decide it sometimes and go ahead with that. That's all to be in like that. I can go, like trade-offs human resources, you do it now, do it latter, do it dream, we took of do it now. Then issues like institutional arrangements, why it's a best way to institutionalize yourself to have probably checked and balances, you wait for the human resources, or you set up the institution now, what you have and do that. So we decided we set up now and we go. So, trade-in and trade-off"

Hence, the development of Tasi-Mane petroleum industries can be implemented where trainings and universities role maximizes to shape the institutional environment too. At the same time, government, international and national firms, collaborate hand in hand by using the principle of learning by doing. This has been explained previously in the institutional field interactions

⁵ Williamson, C. R. (1998) defined institutions represent government defined and enforced constraints while informal institutions capture private constraints.

(DiMaggio and Powel, 1983) that national firms can follow what others have made and achieve success. This argument also supported by a respondent that the capacity building is built from the project itself that is why government gave all the Tasi-Mane cluster project in the international competitive bidding because it will develop the national firms capacity automatically. The efforts that Timorese government has made might fits with North's (1993) Institutional arrangements that supports the idea that government, and private institutional actors are complementary and permit allow for another round of private business practices to develop (North 1990). Moreover, this can be explained in general by the new institutional economics, for example from Williamson's (1998) approach that institutions in one part are a play of the game in an institutional environment. They are social arrangements that may encourage or push economic growth (Libecap, 1997). The Tasi-Mane goals can be only achieved from new institutional economics (NIE) point of view that if all the actors concerned about on how economic, political, legal and social institutions influence their performance (Platteau, 1994a, b).

However, one of the key drivers of this phenomenon is high (political and economic) transaction costs. Yet, there is an alternative for a new institutional arrangement that may balance this dilemma that political institutions could perform a better policy. In empirical data that I collected, the pillars of institutions shape the development of Tasi-Mane project are presented as weak ties and lack of coordination to maximize the efforts when they develop mega projects. This might what North (1990) pointed as an institutional constraints where an organization does not have or is not able to utilize all the resources that it might want to use. For example, there were many institutions have been established in Timor-Leste before Tasi-Mane developed that they are supposed to shape for the successful development of Tasi-Mane project, for instance; Institute for Development Support for Medium and Small Enterprise (IADE), Secretary of State

for Employment Policy and Vocational Training (SEPFPOPE), universities and college, chamber of commerce and industries and many other relevant organizations have not been maximized to contribute to the development of the Tasi-Mane project, nor have they been coordinated properly into the framework of institutions. The central government, MPMR and Timor Gap does things on their own in the design and development of the project concept, moreover, the government monitoring procurement bodies does not consider those potential actors into framework to prepare skills, knowledge, and business competence in building Tasi-Mane infrastructures. This could suggest that these weak institutional ties should change or make to a new institutional arrangement. North (1990) emphasis the institutional framework performs a vital role in the performance of an economy; according to North it decreases the human interactions uncertainty and thus the cooperation's cost. Changing the knowledge or ideology and change in total population will enable those protagonist or main actors to perceive that they might be better off under result in institutional change, and alternative institutional arrangement. Nevertheless, change of institutional is characterized as path dependent and molded by the reaction between political markets and economic (North, 1981). In regard to the towering (economic and political) transaction costs, ineffective or inefficient institutions could continue firmly or persist for extensive time period (North, 1990). However, state as a ruler who maximizes its efficiency/profit targeted to two institutional constraints; transaction cost and level of political competition with competitors and other States. For these arguments, the property rights structure, which maximizes the social product, may not maximize the ruler's (long-term) monopoly rents. Thus, in order to stabilize his power, 'the ruler will agree to a property rights structure that is favorable to those groups with close access to alternative rulers, regardless of its effects upon efficiency' North (1981: 28).

With the above findings and discussion, high transactions could be avoided by changing the current government of Timor-Leste project development and contracting process by introducing a new institutional arrangement where to include Timorese potential actors for collective action. To support this, Williamson (1985) argues that institutional arrangement or governance structure could change depends on the transaction characteristics, moreover, North (1990) defined between the institutional environment and institutional arrangement that ‘the former being a subset of the latter, which is a set of fundamental political, social and legal ground rules that govern economic and political activity’ (Davis and North, 1970: 133).

In this regard, I claimed to complement the current Timor-Leste government project development, procurement/contracting and monitoring process regime (see World Bank and MoF, 2015, p. 129) by proposing a new governance structure/ institutional arrangement “project development, competences and contracting process” within the Timor-Leste infrastructures fund which also fund the Tasi-Mane petroleum infrastructures projects. I believe that it considerably to involve greater actors in collective actions as the response to weak institutional ties; weak coordination and long-term competence building and monitoring simultaneously (Figure 6 *Proposed Project Developments, Competence and Contracting Process (based on the report World Bank and MoF, p. 129)*).

An improved project development and procurement process purposed to complement government contracting process (see 2015 World Bank and Ministry of Finance report) described in (Figure 6 *Proposed Project Developments, Competence and Contracting Process (based on the report World Bank and MoF, p. 129)* below. This figure of Proposed Project Development, Competence and Contracting Process is developed to give some of the solution from barriers and not to only provide solution for the complexity of long procurement process but it includes the

integration of education/building competence, and proper monitoring/quality control in one system. This means that when government develop a mega project or project value exceeds one million USD within the Infrastructure fund it have already involve an integration approach which involves potential actors where in the first stage of the figure is that government and those actors prepare human resource both in higher school and private sector capacity building sector first, so that when the project is developed they already have people available to work with both national and international constructions companies. For the second stage of the figure is that in the project designs and development phases for instance; Tasi-Mane project, the whole government related Ministries and competence building institutions/organizations that associated to the state infrastructure development is already included from the very beginning of the procurement/contracting process and supervision process. This then, government as political actors can shape this environment with law enforcement to govern this economic activity.

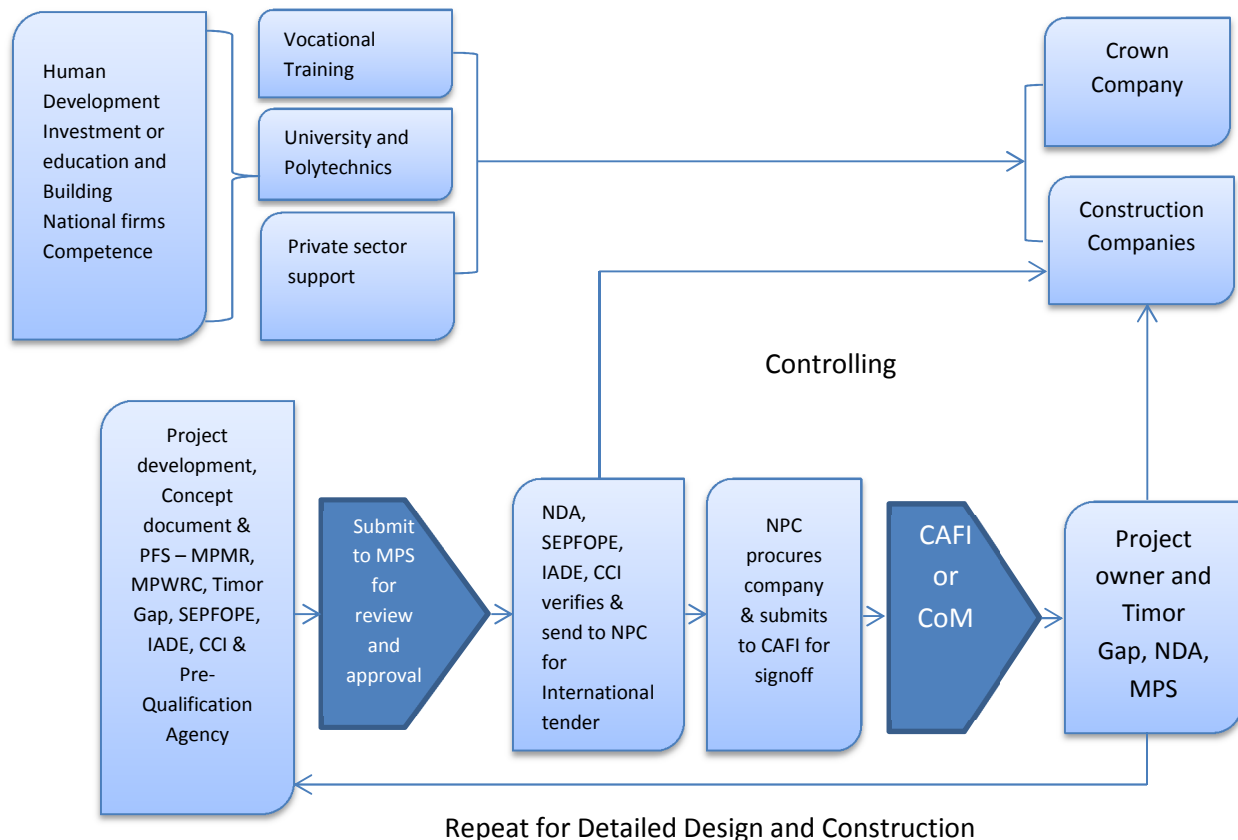


Figure 6 Proposed Project Developments, Competence and Contracting Process (based on the report World Bank and MoF, p. 129)

Secondly, as it not been easy way, one can argue whether the government has provided a sufficient institutional environment to operate in for the actors. There are indeed laws and regulations that define the behavior and performance based on existing or stipulated legal laws in the area. Social norms are however somewhat different from the government ambitions. As it is known now the national firms could have subcontracted the project for the 90 per cent of its cost and leave the tender with the remaining 10 per cent. This misuse of the contractual arrangement has not been adequately thought about beforehand and it can be thought that more “common rules” have been playing instead of legal laws at this time. In relation to this can also contribute to the lack of trust from the government and international contractors over national firms this can be characterized in the setting of organizational behavior (e.g., Eisenhardt, 1989, 1988; Kosnik, 1987) interesting that organizations that supposed to be a potential representatives for other organization could have attempted to behave in order to be successful and have legitimacy in certain environments. It was observed that national firms have not built their reputations, the legitimacy and trust previously therefore one of the underline issues that national firms did not get the Tasi-Mane project was the problem of work morale is true. Therefore, national firms are positioned in the same environment that they have provided to interact with both government and international contractors and to practice good behaviors to be successful. To conclude this institutional environment and that it needs to be developed more to be a real formatter and a rule maker for the actors. That the laws in their today statement hinder national firms from tender/bidding process and do not involve them in further steps too. There is a mismatch between what government says and promises and what it really does on paper “for real”.

Institutional arrangements and holdup problem

Williamson's (1985) approach on governance structure/institutional arrangement illustrated by its attentions on incomplete contracts. One of the reasons why Timorese firms/industries cannot win the Tasi-Mane international project might be described by the framework of transaction cost, organization of economic enforces/ imposes costs because sophisticated contracts are normally incomplete (Williamson, 1985). Both in government bidding process and the international companies that have been operated in the Tasi-Mane project have difficulties involving national firms or sub-contracting some of its work, is actually proven that it is expensive to do such arrangement of governance because what government sees in bidding process and what international firms faced is that the institutional environment's situation to support national firms to have chances to win the project or as sub-contracting beneficiary has some limitations, for example lack of capacity in the field level, hence, government or international contractors may not to cover investments in capacity building for providing education and training whomever its partner is when the project owner seek for the high quality of specifications and that the main contractor seek for efficiency. Because contractual incompleteness may exposes the contracting parties to some sort of risks. This situation is actually happened in the Tasi-Mane clusters project where international contract cannot here locals with risks; hence, the administering agreement may no longer be effective. This can be lead to Williamson (1989) transaction cost economic framework that a costs major source that a firm must attempt to reduce so that increases efficiency of economic or in other word that if the friction between to make and to buy is higher than through and interval hierarchical system the international firms should internalize. To internalize, that is, integrate vertically, to reduce transaction cost. This is phenomenon is more relevant to what Williamson (1991a) call as "hold up" problem or maladaptation cost, this is the

best-known example of a contractual hazards. Therefore, transaction cost economics eases this premise that several complex contract are unpreventable incomplete. For instance; installation of airport, supply base, specialized and other sophisticated contract in Tasi-Mane petroleum infrastructures project is needing complex contract, thus this kind of contract will characterized be incomplete that might need some repairmen of agreement with some potential contingencies in future. For example Tasi-Mane contract relations in which a government and international contractors agreed upon on shared goals on maintenance of the specialized equipment and projects that each of them are going to responsible for.

This problem is consistence with explanations of Monteverde and Teece (1982) and Globeman (1980) after they test contractual interpretation of vertical integration that the effects of the specificity of assets, stipulated as worker-specific knowledge or “application of engineering efforts” they found that technical knowledge and use engineering efforts are the main backwards integration. This is also explained by one of the government procurement officers that such Suai Supply Base cluster project in Tasi-Mane is highly required technology, knowledge and experience. When the main international contractors started internalize the entire Tasi-Mane clusters project that is the turning point national firms were limited to be part of the game. I found that there was anger from national firms when they were excluded from the project with the high requirements from international competitive biddings, in relates to this DiMaggio and Powell (1983) isomorphic coercive pressure can partially be explained that where national firms are forced to change by external forces. The pressures with the meaning that national firms meet high requirements of international bidding criteria that are actually not reflecting to their own conditions. To sum up, in modest explanation, transaction cost economics attempts to describe

how trading partners opt, from the alternatives visibility institutional, the arrangement that safeguards their relations-specific investment at the least cost.

Chapter 6.0 Conclusion and future research

6.1 Conclusion

The research problem of this study is “**what institutional forces have been forming the current contractual regime?**” Therefore, the aim of this study is to illustrate and analyze the development of Timor-Leste contracting regimes, paying attention to Timor Gap’s Tasi-Mane project and national firms/industry involvement. To do so, the study tries to solve the following specific research questions: What institutional actors have participated in the formation of current regime for Tasi-Mane project and how? How was the local industry/national firms included and excluded in this formation of current contractual regime? What forces has been stimulating /hindering for formation of the contractual regime? And how does government contractual regime balance short term quality versus long term capacity building?

This study illustrates the development of Timor-Leste contractual regime during the past 13 years and how it has shaped the participation of national firms in the development of infrastructure projects, particularly Tasi-Mane petroleum infrastructure project. It also offers insights into the interactions between the main actors in the emerging organizational field in Tasi-Mane petroleum infrastructure project arena as a result of changing contractual regime and political development.

The contractual regime and political changes presented that key government (political) and businesses influential actors that shape the Tasi-Mane infrastructure project are in the process of establishing and capacity building stage. Empirical data has shown that Timorese political and

business actors are new and lack experience, capacity and education; they are exposed to lack or enforcement/lack of regulation, lack of interaction/coordination, and lack of trust to one another and sometimes conflicts.

Therefore the organizational field remains weak and lacks connectedness and understanding of mutual goals. In addition, institutional arrangements are also weak and not sophisticated. In emerging economies from the place where international contractors coming from, the emergence institutional fields and institutional arrangements at political and business levels usually represents the mixture/ combination or mix-forms of similar versions. However, in terms of relationships, coordination, interest and control, the conditions in Timor-Leste are in fact very different compared with more advanced countries. The establishment of relationships between the key actors in Timor-Leste is still very challenging where public policies are still not favoring better coordination, this is still and ongoing learning process highlighting several issues that has not been solved. Structured network of relationship/interactions, lack of coordination or weak institutional arrangement may not be suitable for international contractors to build business networks of market-driven approach. Moreover, creation of similar values and practices as well as institutions, seeking for an appropriate equilibrium between various coordination and networking relationships in terms of behavior and actions, building of common practices by Timor-Leste and international contractors, all represent great importance and pivotal determinants for successful in execution of the projects. This also represents a country that has been struggling with economics development.

DiMaggio and Powel (1983) institutional pillars (regulative), institutional mechanisms and institutional field (increasing interactions among organizational in the field) where considered in combinations to explain the degree of participation of national firms in current formation of

contractual regime. In Timor-Leste, in the case of Tasi-Mane project, local industry/national firms were both included and excluded in the formation of current contractual regime, originated from (1) its infrastructure development and country strategic plan pushes them to participate but at the same time stating the high requirements is a barrier (2) local content clausal contract (3) increasing interactions and information exchange (4) improving behavior, practices and proactive learning.

The study argues that the regulative and procurement laws pressures (Scott, 2008b; and Lounsbury, 2008) will motivate and change national firms earlier work morale and better embeddedness can enable them to grow by themselves, push themselves to fulfill the requirements set up by the government in terms of capital and experiences and be able to be part of the sub-contracting partner where applicable. This could be achieved if national firms increased their interactions with government and international contractors. DiMaggio and Powel's (1983) normative isomorphic system constitutes that national firms can follow what international organizations have achieved and reach favorable outcome in their work.

In this study, the combinations of macro and micro level of institutional theory have been utilized in order to observe how institutional forces shape the government contractual regime and how these forces are connected with organizational change. The forces that have been hindering the current formation of contractual regime in the case of Tasi-Mane petroleum infrastructure supporting project originated from the government infrastructures program- implementation of strategy development (SDP) that requires rapid development of Tasi-Mane, secondly, regulative pressures, and thirdly, the interactions of different actors shaping the organizational field. The study advises that these forces could make the difference in the organizational fields and encouragement or push for national companies to disengage or separate their actions and

behavior or just passively mimic or imitate the others, or national firms have to be responsive towards the institutional pressures by proactively changing their behavior and performance and promote better facilitating/ interaction of better cooperation.

Finally, this study has also briefly analyzed the dilemma situation that Timor-Leste government have faced in the development of Tasi-Mane infrastructure, where they seem to have a short-term focus on quality rather than long-term capacity building. However, the NIE institutional arrangements partially help in explaining this phenomenon, to balance this dilemma, government should be shaping the institutional environments and at the same time utilizing all its organizations both public and private to complement each other and making it together and learn together. Developing favorable public policy where all actors and resources are maximized to be functioning, and minimizing what North (1990) pointed as institutional constraints. Government is also required to propose an alternative of current institutional arrangements to avoid high (political and economic) transaction costs, through integrated competences that secure long term capacity building.

6.2 Limitations

One potential issue of this study is that the respondents have not been able to look over the transcribed interviews and comment on their own words. This can be partly explained due to the interviews have been performed in different languages, but later transcribed and translated into the English language. Due to the limited time for the writing of this thesis, this step has been solved by inviting two additional researchers to control some of the transcriptions.

It presents that the study is quite comprehensive nature, utilizing analysis from new institutional economics, sociology and agency theory – new institutional in terms of both institutional macro

and micro level analysis, government (political) and business actors, changes in economic development, organizations and institutional in a setting or contextual relationship, may be considered or take into account as reasons for its possible limitations. Nevertheless, my central idea of focus was to offer a comprehensive view of the circumstances, conditions and indicating or showing major important array or provide directions for future research.

The study has been conducted in Timor-Leste which is a new country and has a short history of contractual arrangements. Thus the findings cannot be easily translated to other contexts. However this was not the intention of this thesis.

6.3. Newly discovered knowledge gap advices

The development of Timor-Leste contractual regime focusing on Tasi-Mane infrastructure project found dilemma situations; however, most of the government infrastructures were built from early 2008 and from that time have remained the same. Therefore, this study suggests different ways of solving these challenges that might shape this phenomenon in order to give greater opportunities for national firms/industries and at the same building national competences to deliver better quality services as follows: **firstly**, for the central government, especially MPMR and MPWTC may establish state owned infrastructure and consultant companies. This may build national competences in which one day these state companies may become responsible for the maintenances and they may build the same projects in other countries. Developing infrastructures is good for economy growth (Calderón & Servén, 2004; Cockburn *et al.*, 2013), but it will only be meaningful when more Timorese get involved and maximum goods and services are acquired locally. Therefore, building national competence is very crucial to balance this dilemma, in addition, Timor-Leste government has a role develop an appropriate procurement law that protect national firms/industries interests (e.g., Perng and Chan, 2004) and

government are in authority to shape all the relevant actors with proper policy and to make sure that there is an interactions channeled to all relevant actors, to maximize their ability to contribute to building of competences as well as stablishing state guarantee fond or making sure that banking system provide credits for local companies. Capital market establishment should be prioritized; moreover the law and legislation for these issues must be renewed and introduced, so that it can bridge the trust between banks and constructions companies. **Secondly**, international contractors should provide knowledge and skills in building and consider the local participation seriously, hiring skilled local people and sub-contract projects to national firms who have passed the pre-qualification screening from the government. By doing this, Timorese people and national firms can learn from them. **Thirdly**, for the Chamber of Commerce, and national companies, they may strengthen training, experience exchange, linking with vocational trainings and enhance interactions with both government and international contractors. Change in their behavior is waited by government in order to provide the national firms with projects but they may also invest in productive sectors. Learning from others who have already success as well as building a good reputation and legitimacy. This may create trust from others especially to get access credit from banks and government as well as international firms. **Fourthly**, for universities and college, the universities should design courses which contribute to the booming infrastructures development. For example, courses that need to contribute to development of the Tasi-Mane clusters project: engineering, creation of MBA at National University of Timor-Leste (UNTL) where people from private sectors and various discipline come to study project management and business administrations. In addition, research and development (R&D) should be established in order to discover new knowledge, creating innovations and improving services and products. This R&D can be the basis for government ministries including its agencies (MPS,

NDA, and NPC) and Timor Gap to design the Tasi-Mane and infrastructures development, procurement and contracts and monitoring. **Lastly**, the World Bank, ADB and other international donor partners' which play an important role today should provide capacity building which is incorporated in infrastructures development. Advices for government include contracting and procurement regime flexible enough tailored to national context and cultures, international convergence and standards are good but it may not fit to other countries like Timor-Leste, as the result of ICB process, none of Timorese companies participate in the Tasi-Mane infrastructures project. In addition, international agencies may provide advices, but government of Timor-Leste is in authority to decide on everything, and is not always following the advices, the infrastructures project and SDP implementation should take into account this dilemma by considering the following questions: (1) should we build fast through inviting the international firms with their equipment and competences and not prioritize learning of locals in order to reduce the building time (2) should we use more time and involve more learning and capacity building (3) should we pay attention to both issues, however the price for both building in restricted time and learning the local on the way may be high.

6.4. Future research

Broadly, I recommend that different positions/ point of view of institutional theories might be encourage to be used or the fever specific institutional theories stand point of view to top up the gap in study or further research on the establishment of institutional arrangement, contractual regimes, and the relationship interactions of business actors and government (political) actors in high (political and economic) transaction cost. In the context of this Tasi-Mane infrastructures project and in its other international projects, Timor-Leste with the status as developing countries

born in emerging world economies nowadays, it is interesting to see how its national firms can learn from international contractors and get up from their own efforts to participate in such project. It might evidently particular fascinating case that to some extent Timor-Leste has adopted international procurement standards in its current regime that not meet its own national firms circumstances, on the other side, it may evidently prove particularly appealing to focus on practice and management of international project in which various regimes face in one place or encounter one another. Refers to its recent development both Timorese government and its national industries all together face new introductions from Western style business practices. For instance, introducing international standards in government contracting regime and promotion of emerging way of doing business practices from multi-national companies in a very poor or in a developing country status have a right to have an especial consideration. That type of studies might be very useful preferable to comprehend the characteristic of development of actors in the context or emerging or advance forms.

The comprehensive study also has been focusing on how was the national firms involve and not involve in the formation of Timor-Leste current contractual regime can apply further research by more focusing to development process with the more historical way of approaching within the institutional formations history and motives as well main historical actors at the time. This way, can contribute to clear understanding of which level national firms have excluded and will participate in future. This type of broader studies, for example like this one, attention being paid to institutional forces hindering for the formation of the current contractual regime might also be needed further follow-up by putting the process of government and its policy, small-actors and the organizational fields as center of attentions. This might contribute to the role of government and other actors' interactions in shaping both quality work and competence building.

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Appendixes

Appendix 1 Sample of informants

Name	Position	Place and duration of interview
Informant 1	Minister of Petroleum and Mineral Resources (MPMR)	At his office Fomento-Dili, 1 hour (took place in 2 nd of March 2015)
Informant 2	President and CEO of Timor Gap E.P	At his office Level 3, Timor-Plaza-Dili, 35 minutes, took place on the 24 th of February 2015.
Informant 3	Office of former Prime Minister now became Ministry of Planning and Strategic Investment (Director for National Agency of Development (NAD)	At his office, government palace, (45 minutes) took place on the 16 th of February 2015.
Informant 4	Member of Procurement Commission	At his office (National Procurement Commission (CNA), Lecidere-Dili) (an hour) took place on the 19 th of February 2015.
Informant 5	Senior Procurement Specialist, National Procurement Commission	At his office Lecidere-Dili, 11:15 (55 minutes), took place on the 27 th of February 2015.
Informant 6	Instituto de Apoio ao Desenvolvimento Empresarial (IADE) or The Institute for Business Development Support	At his office Mandarin-Dili, (30 minutes) took place on the 10 th of March 2015.
Informant 7	Minister of Public Works, Transportation and Telecommunication	At Hotel Timor-Dili, (40 minutes) took place on the 14 th of March

		2015.
Informant 8	La' o Hamutuk Institute for Development, Research and Analysis as NGO who monitoring on the petroleum sector in Timor-Leste	At his office La' o Hamutuk, Bebora-Dili (39 minutes) took place on the 23 rd of February 2015.
Informant 9	Waskita Karya Ltd (from Indonesia) Suai Airport Main Contractor based in Tasi-Mane project area in Suai.	Interview at his office Holbelis Beskem-Suai, (25 minutes) took place on the 5 th of March 2015
Informant 10	Director of PECAR Unipessoal, the only Timorese national company who participated in the biddings of Suai airport in Tasi-Mane project	Interview at his home Comoro-Dili, (1 hour) took place on the 9 th of March 2015
Informant 11	Director and Owner of Tino Lina, Lda. A national construction company and Joint Venture, based in Dili and Tasi-Mane Area	Interview at his main office: Bidau-Dili, (30 minutes) took place on the 23 rd of February 2015.
Informant 12	Director and Owner of Monte Veado, Lda. General Contractor, Asphalt Plant & Heavy Equipment and President of Chamber of Commerce and Industries of Timor-Leste	Interview at his office: Acait - Dili, (25 minutes) took place on the 24 th of February 2015.
Informant 13	Director of Maun Alin Construction Lda, a construction company based in Tasi-Mane project, also assumed a position as President of Chamber of Commerce and Industry of Covalima Municipality.	interview at his office Camanasa-Suai, (30 minutes) took place on the 5 th of March 2015

Informant 14	Uniao Suai Deme Unipessoal, a local firm in cluster locations and President of Assembly of Chamber of Commerce and Industry, Covalima Municipality	interview at his house Suai, (25 minutes) took place on the 5 th of March 2015
Informant 15	Vice-President of Chamber of Commerce and Industry of Timor-Leste	Interview at his office Chamber of Commerce and Industry (CCI-TL) Acait-Dili, (30 minutes) took place on the 19th of February 2015.
Informant 16	An International Adviser to Chamber of Commerce and Industry of Timor-Leste	Chamber of Commerce and Industry (CCI-TL) Acait-Dili, (45 minutes) took place on the 19th of February 2015.

Appendix 2 Guide questions

No.	Questions for government officers
1	To what extent have you put in place mechanism that allows national firms to take part in Tasi-Mane project?
	a. How do you formulate or organize the contract? And how do you control them?
	b. Have you bided the Tasi-Mane project to local/national companies?/how Timorese company are invited?
2	Do you train local firms to have skills?
3	How important is it that national firms take part in Tasi-Mane project?
	a. Why do you bid? And why do the local companies participate the bidding?
	b. Or why do you offer to international firm? Is it because you need things today, it is because time consuming of teaching local firms?
	c. Do you have strategy to balance “get things today” or “train local people/firms” first?
	d. Can you give example whats going on?
	e. Do national firm sell their contract/project to foreign/Indonesia Company? Specifically in Tasi-Mane project
4	Do local companies have a chance to partner with international company in Tasi-Mane project? How?
5	Do government and local firms have any problems with international company
6	Who will be responsible for the maintenances of the Tasi-Mane Project after it is finished, where do we get skilled companies?
7	How many local companies have bid? How many have got it? How many have bid not got it?
8	How many have not participated the bidding? Why does it so? How many international companies bid and how many have got it?
9	How do we increase national involvement? Involvement of local Companies in such Tasi-Mane project/how do we prepare them?
No.	Questions for firms (international, national and locals)
1	What government is asking you to deliver by contract? Does it include educating

	you? Do government involving you in the process? How?
2	Did you success to do that? Did you meet any challenges? Did you get help from government?
3	Do you have a previous practice on doing this type of contracts?
4	What where your challenges in getting a contract? What are your challenges in delivering the work/ finishing the work?
5	Why do you bid? How do you feel if you could not get the project and how do you feel if you get the project?
6	Do you agree that international companies who have worked in Tasi-Mane project deliver quality work compare to yours?
7	Why do you bid? Have you ever been partnering with foreign firms? Do you have knowledge spillover or knowledge transfer, technology transfer from International Company?
8	What are you lack that lead make you fail to get Tasi-Mane Project? (e.g. competences, technologies, equipment?)
9	How do you prepare yourself in order to be better able to compete for bids?
No.	Questions for Chamber of Commerce and Industry
1	What have you put in place to help local/national firms to take part in Tasi-Mane project?
2	What could local firms do themselves to improve their chances of winning a bid? and
3	What could the government do to increase local firms' chance of winning a bid?